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CONTENTS

The Non-Christian Peoples of the Philippine Islands

With 32 Pages of Illustrations in Eight Colors

By DEAN C. WORCESTER

Secretary of the Interior of the Philippine Islands, 1901-1913

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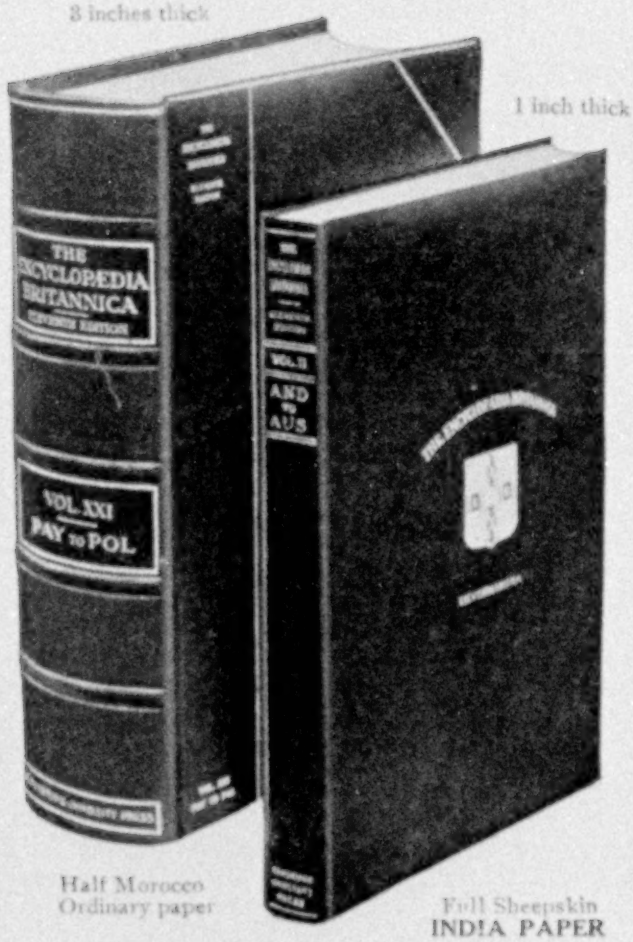

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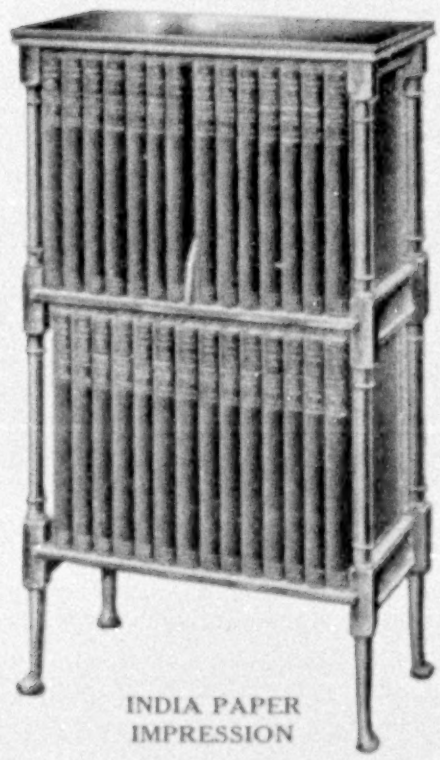

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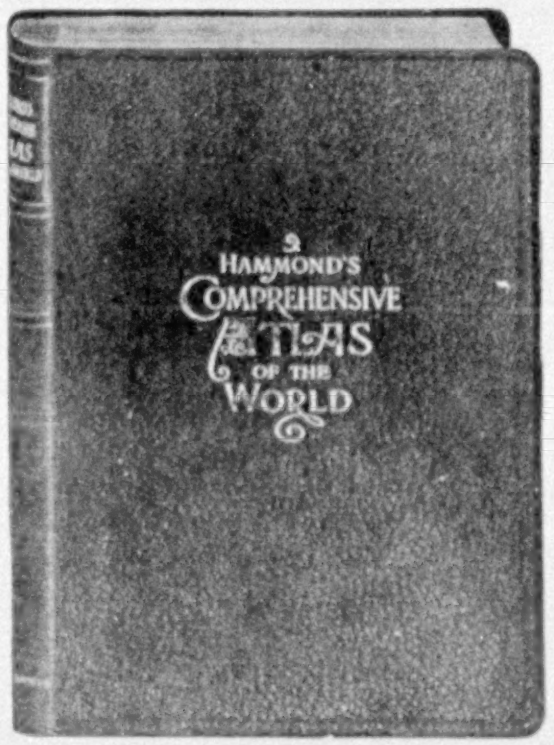

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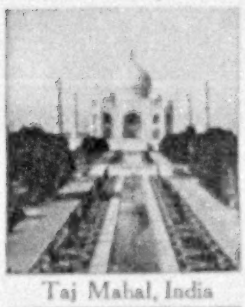

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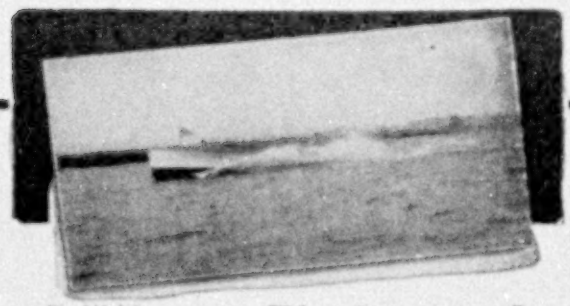

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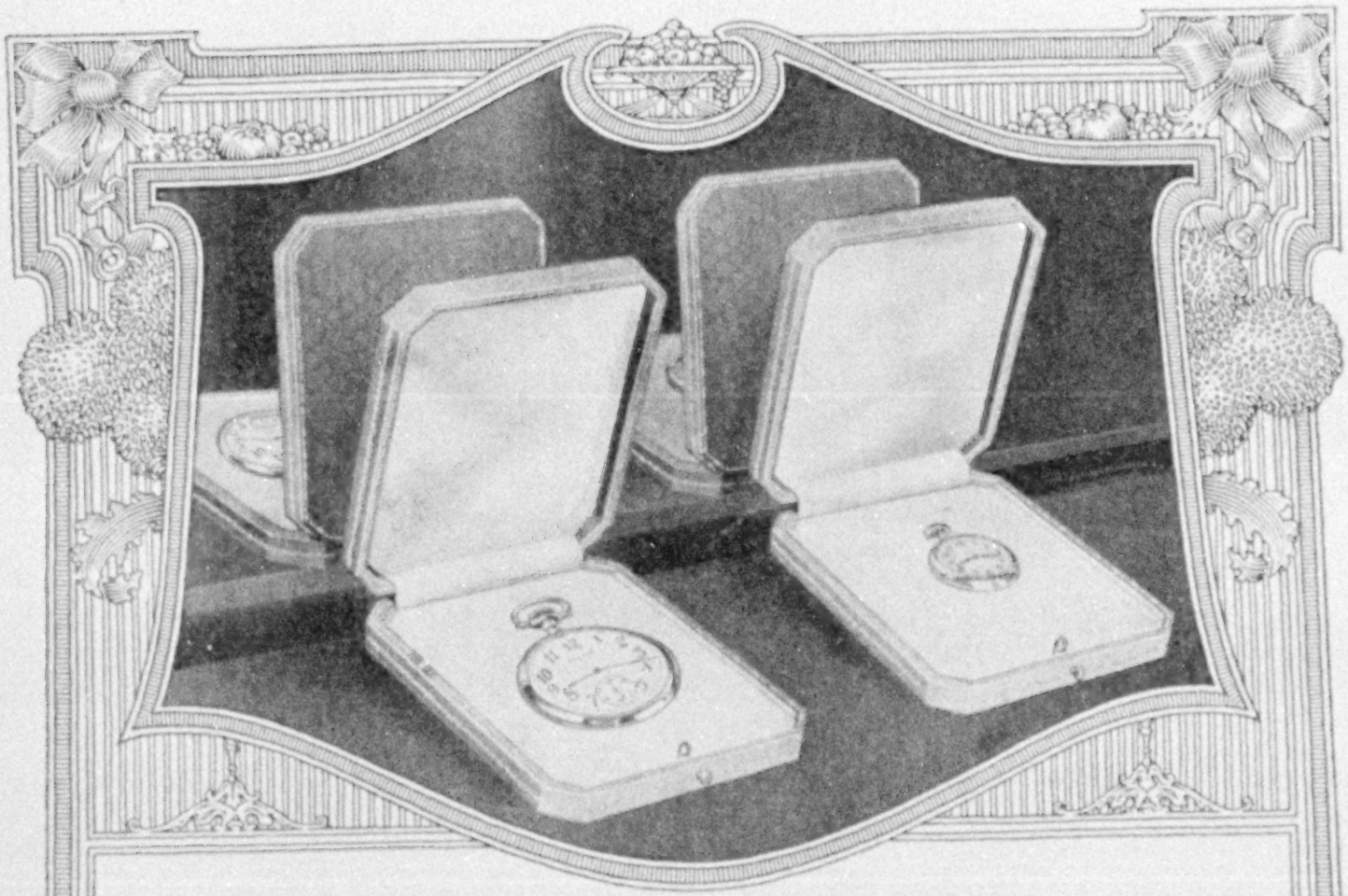

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VOL. XXIV, No. 11 WASHINGTON NOVEMBER, 1913

THE NATIONAL GEOGRAPHIC MAGAZINE

THE NON-CHRISTIAN PEOPLES OF THE PHILIPPINE ISLANDS

With an Account of What Has Been Done for Them under American Rule

By DEAN C. WORCESTER

SECRETARY OF THE INTERIOR OF THE PHILIPPINE ISLANDS, 1901-1913

Author of "Field Sports Among the Wild Men of Luzon," with 54 illustrations, published in the March, 1911, number; "Taal Volcano and Its Recent Destructive Eruption," with 45 illustrations, published in the April, 1912, number, and "Head-hunters of Northern Luzon," with 103 illustrations, published in the September, 1912, number of the National Geographic Magazine.

THE non-Christian peoples of the Philippine Islands constitute approximately an eighth of the entire population of the islands. The territory which they occupy or control comprises an immense region in northern Luzon,* all but a narrow coastal strip in Mindoro, all but a few small isolated regions along the coast in the great island of Palawan, the whole interior and a considerable part of the coast region of Mindanao, extensive areas in southern Luzon and in Negros and Panay, as well as the islands of Basilan, Jolo, Siassi, Tawi Tawi, Balabac, Cagayan de Jolo, and the very numerous adjacent small islands. It is not too much to say that at the present time approximately half of the territory of the Philippine Islands is inhabited by them, so far as it is inhabited at all.

* There are probably no regions in the world where within similar areas there dwell so large a number of distinct peoples as are to be found in northern Luzon and in the interior of Mindanao.

I desire to bring home to the readers of the NATIONAL GEOGRAPHIC MAGAZINE some of the more essential facts as to the division of the non-Christian inhabitants of the Philippines into really distinct peoples, and to this end I shall summarize briefly some of the important known characteristics of each, illustrating my statements, when practicable, with reproductions of photographs taken either by the government photographer, Mr. Charles Martin, or by myself. Typical individuals, houses, settlements, and scenes are shown, so that the reader obtains at a glance facts which it would be impossible to state in words within the limits of any publication smaller than a bulky monograph. In order to facilitate reference, I shall take up the several tribes in alphabetic order. In the latter part of this article, pages 1240 to 1256, an account is given of what has been done for these peoples under American rule.

All of the native inhabitants of the Philippines are assignable either to the black race (the Negrito peoples) or to the brown race (the peoples of Malayan origin). So far as concerns the latter, it should be added that the original Malay blood has in many instances been materially modified by intermarriage with Negritos, Mongolians, or Caucasians, although a considerable number of the mountain tribes have intermarried little with Negritos, less with Mongolians, and with Caucasians hardly at all. Indeed, among the Bontoc Igorots in the earlier days, when motherhood was sometimes forced upon the women by white invaders, it was the custom promptly to kill the resulting *mestizo* children.

I have already described the Negritos, Ilongots, Kalingas, Ifugaos, Bontoc Igorots, and wild Tingians in the September, 1912, number of the NATIONAL GEOGRAPHIC MAGAZINE, devoting special attention to their head-hunting customs; but as the convenience of having even brief descriptions of all Philippine non-Christian tribes included in one article seems obvious, I venture here to record some additional facts concerning these peoples, and to restate some few of the facts already set forth.

Incidentally, I give a few references to important publications, from which those who care to pursue the subject further can obtain many additional details.

THE ATÁS (SEE PICTURE, PAGE 1167)

This designation is derived from a word meaning "high" or "on top of" and is applied to the members of a numerically rather unimportant group of people inhabiting high mountains in the interior of Mindanao back of the town of Davao.

We are still indebted to Jesuit missionary priests for practically all the reliable information which we have concerning these people, and it is meager indeed. The Jesuits say of them, "The Atás inhabit the regions about Mount Apo and to the northwest. They are of a superior type, and this is especially true of their chiefs, who have aquiline noses, thick beards, and are tall. They are very brave and hold their own with the Moros. Their probable number is 8,000."

While I am inclined to doubt the propriety of ranking these people as a distinct tribe, as this has heretofore been done, and as I myself have seen them but once, I here provisionally adopt the decision of others who have had better opportunities for investigation (see photo, page 1167).

THE BAGOBOS (SEE PICTURES, PAGES 1161 TO 1163)

The people of this interesting tribe, who are said to number some 12,000, are confined to the district of Davao, in Mindanao, and more especially to that portion of it in the vicinity of Mount Apo. They are strong, robust, and relatively tall, reaching a height of 1,750 millimeters (roughly, about 5 feet 9 inches). Many individuals are quite noticeably light-colored. Their hair is not infrequently wavy or slightly curled. The Jesuits say of them that "their profile is effeminate, the boys and girls being indistinguishable and the latter having the vigor of the former." Not only is this true, but I have noted that visitors in looking over my collection of photographs very commonly mistake Bagobo men for women.

The dress of the Bagobos is especially striking. The cloth which they use is woven by them from carefully selected and dyed fibers of Manila hemp, and is subsequently treated with wax in such a way as to make it very smooth and durable. The subdued colors of this cloth produce a pleasing effect, and it is ornamented in a most tasteful manner with elaborate bead and mother-of-pearl work. The men wear short, long-sleeved jackets, often elaborately ornamented, trousers which do not reach quite to the knee and have beadwork around their bottoms, kerchiefs or turbans on their heads, and sashes or girdles at the waist, into which are thrust their war-knives, in peculiarly shaped double-pointed sheaths. These sheaths are often elaborately ornamented with beadwork and with horse-hair plumes (see page 1161).

When a man has killed others, he wears on his head a kerchief of reddish-chocolate color ornamented with characteristic almost rectangular white markings, made by tying knots in the cloth before it is dyed. The edge of this kerchief is usually ornamented with beads, and it is worn with one point hanging down over the forehead of the owner. Light-colored straight lines extending across this point are said to indicate the number of his victims.

CURIOUS EAR ORNAMENTS

In addition, the men commonly wear behind, suspended from their shoulders by thongs which pass under their arms, bags highly ornamented with beadwork. The men are also especially fond of a peculiar ear ornament consisting of an immense disk of ivory two or more inches in diameter, connected with a second and somewhat smaller disk by a neck-piece and resembling an enormous collar-button with a short shank (see page 1163). The smaller disk is thrust through a great opening in the lobe of the ear and the flesh contracts about the shank, holding it securely in place. Such an ornament may be worth one or more carabaos, according to its size, and when a man is so fortunate as to own two ivory disks he usually also wears bead necklaces connecting them.

The offensive weapons of the Bagobos are well-shaped lances and heavy knives. For defense they use large wooden shields of characteristic form, which are often quite elaborately carved (see page 1162).

The women wear upper garments and skirts which very effectively cover their bodies. Their arms, and sometimes their ankles as well, are loaded down with ornaments fashioned from brass and from the shells of giant clams. They are very fond of small bells, which are worn around their waists and legs suspended from bead pendants. While they do *not* have bells on their toes, they are abundantly supplied with rings on their fingers, and certainly have music wherever they go (see pages 1161 and 1163).

HUMAN SACRIFICE PRACTICED

The Bagobos live in small villages, ruled by chiefs called *datos*. They are relatively industrious agriculturists. Some of them own quite extensive hemp plantations and have accumulated considerable wealth. A number of American planters have employed Bagobos as laborers and have found them satisfactory.

In the past the people of this tribe have taken and kept slaves, and have habitually indulged in human sacrifices when things were going wrong with them. In fact several such sacrifices have been made since the American occupation, the simple-minded participants admitting the fact readily enough and being quite surprised that any one should take exception to a custom believed by them to be not merely proper but highly commendable.

They have until recently carried on intermittent warfare with neighboring tribes and to some extent among themselves, but are now living quietly and peaceably.

They are a music-loving people and fashion some large and beautifully ornamented stringed instruments. Some of their dances are most attractive. I have known a professional Bagobo teacher of music and dancing.

Much time has been devoted by several competent observers to the study of the Bagobos, and when the results of their observations are published we shall know much more about the people of this tribe than we do at present. They are certainly in many ways most interesting and attractive; but the custom of making human sacrifices, which they share with the Manobos, does not commend itself to the average American. This custom alone affords adequate ground for separating them from nearly all other Philippine tribes.

THE BILANES (SEE PICTURE, PAGE 1166)

The Bilanes inhabit a portion of southern Mindanao lying to the west, south, and east of Lake Buluan and extending to the end of the little peninsula which

terminates in Pungian Point; also the mountain peaks of the Cordillera between Sabói and Malalag, and the Sarangani Islands, which lie immediately south of the southernmost point of Mindanao.

The mountain dwellers are attacked and enslaved by neighboring tribes, but those living in the Sarangani Islands have proved abundantly able to protect themselves.

No special study of the people of this tribe has ever been made and no reliable information is available as to their number (see page 1166).

THE BUKIDNONS (SEE PICTURES, PAGES 1164 TO 1166)

The designation "Bukidnon," which really means "mountain people," is generally understood to refer to a tribe which inhabits the subprovince of the same name in northern Mindanao, and in one or two places extends over the mountain barrier which forms the dividing line between Bukidnon and Butuan. At present they number 25,000 to 30,000. They are frequently called "Monteses," but this name is a Spanish term meaning "mountain people."

Many of the men and women are conspicuously tall. The hair of some individuals is straight and lank; others have wavy hair; while a limited number, in whose veins there doubtless flows a considerable amount of Negrito blood, have rather closely curling locks. Many individuals are of very prepossessing appearance. One's attention is immediately attracted by the small and often very slender hands and feet of the women.

Well-to-do men wear long trousers reaching to the ankles and hanging outside of these long shirts with full sleeves. Trousers and shirts are made of pieces of bright blue, scarlet, and white cotton cloth carefully stitched together in more or less elaborate geometric patterns and are of very striking appearance (see page 1166). Trousers often have cuffs at the bottoms of the legs.

Datos who have killed large numbers of enemies wear a most remarkable head ornament, fashioned from cloth of gold, with elaborate scarlet, blue, or white tassels (see page 1164). So far as my observation goes, no other Philippine tribe has anything in the least like it.

The women wear long-sleeved upper garments of scarlet, blue, and white patchwork. Their skirts are long and may be fashioned of the above-mentioned materials, or made of solid pieces of cloth purchased from the Filipinos of the north coast or the Moros who live to the south and west (see pages 1165 and 1166). Most of the women have very large silver ear ornaments of characteristic form "buttoned" into great holes in the lobes of their ears. Their hair is worn banged across the forehead, with enormous lovelocks hanging down in front of their ears. They wear rings of brass or silver on their fingers and toes, the number increasing with the wealth of the owner until individual digits are completely covered and hence become practically useless (see page 1165).

A Bukidnon man is supposed to have but one wife, but frequently keeps, more or less openly, a number of concubines.

THE MOUNTAINEERS SETTLE ON THE PLAINS

In the past the Bukidnon people have preferred to live scattered through the mountains in isolated families or small groups. During Spanish days Jesuit missionary priests brought considerable numbers of them together into villages, and since the American occupation almost all of them have been persuaded to forsake the forest-clad mountains in favor of the level, fertile plains, where they have built good houses grouped in beautifully kept and sanitary villages, which have broad plazas and clean, well-drained streets (see pages 1232 and 1236).

The Bukidnons are naturally a peaceful and a very industrious agricultural people, but in self-defense have been compelled to stand off the neighboring more warlike tribes of the interior and their Christian Filipino neighbors as well.

Since 1907, when the subprovince of Bukidnon was cut off from the province of Misamis, active efforts have been made to protect these kindly and naturally industrious, intelligent, and progressive people, and the results obtained have been most satisfactory.

BAGOBOS

On the west side of the Gulf of Davao, a deep indentation on the south coast of Mindanao, the large island at the south of the group forming the Philippines, live a primitive tribe called the Bagobos. They are remarkable for their picturesque costumes which are always gay with beads, bells and embroidery. Living in small villages, under chiefs called *datos*, they raise in their forest clearings, maize, rice and a very fine quality of hemp. The Bagobo men are remarkable for their effeminate profile and are with difficulty distinguished from the women.

BAGOBO WARRIORS

Though not essentially a warrior tribe, the Bagobos have curious religious beliefs which incite them to certain bloodthirsty and repulsive deeds. In warfare they take not only the head of their slain enemy but the hands and heart as well. Even within recent years they have been guilty of human sacrifice and their custom was to eat the sacrificial victim, all of them owned slaves obtained either by purchase or capture, and it was a slave who was usually offered at the annual festival of their god Diwata. The people generally are clean and sober, but all classes are addicted to the betel nut, which they chew with tobacco or *buyo* leaves.

CHIEF ATOS OF THE BAGOBOS

The spotted red and yellow costume shows that he has killed men. Like most Bagobos he is never without his weapons, the great *bolo* worn on his left side and the short stabbing knife at the right. Note the huge ivory ear ornament.

A BAGOBO WOMAN

The red and yellow skirt belongs only to the wife of a man killer but the rest of the costume is typical of the Bagobo women, especially the bell-decorated bag worn from the shoulder. The cheap European fan in her hand contrasts strangely with the curious bead pendant which hangs from ear to ear.

A BUKIDNON WARRIOR

He is ready for the fray. The upper part of his body is heavily padded as a protection against *bolo* cuts. The word Bukidnon means "people of the *bukid*," or mountain forest and the tribe bearing this name seems to be descended from those natives who escaped conversion and have remained in the interior from the Spanish conquest till the present day.

OLD BUKIDNON CHIEF

"*Datos* who have killed large numbers of enemies wear a most remarkable head ornament fashioned from cloth of gold, with elaborate scarlet, blue or white tassels . . . no other Phillipine tribe has anything in the least like it."

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BUKIDNON WOMEN, MINDANAO

"The women wear long-sleeved upper garments of scarlet, blue and white patchwork. Their skirts are long and may be fashioned of the above-mentioned materials, or made of solid pieces of cloth. They wear rings of brass or silver on their fingers and toes, the number increasing with the wealth of the owner until individual digits are completely covered and hence become practically useless."

A BUKIDNON BELLE

Though most of the Bukidnon are still pagan there are a few who are Christian. To this number the girl shown in the picture belongs. Note the cross, and the two rosaries worn around the neck. The necklace is formed of silver coins, Spanish, English and Mexican pieces being represented. The extremely modern pink celluloid comb forms a curious finish to this otherwise picturesque costume.

A BILAN MAN

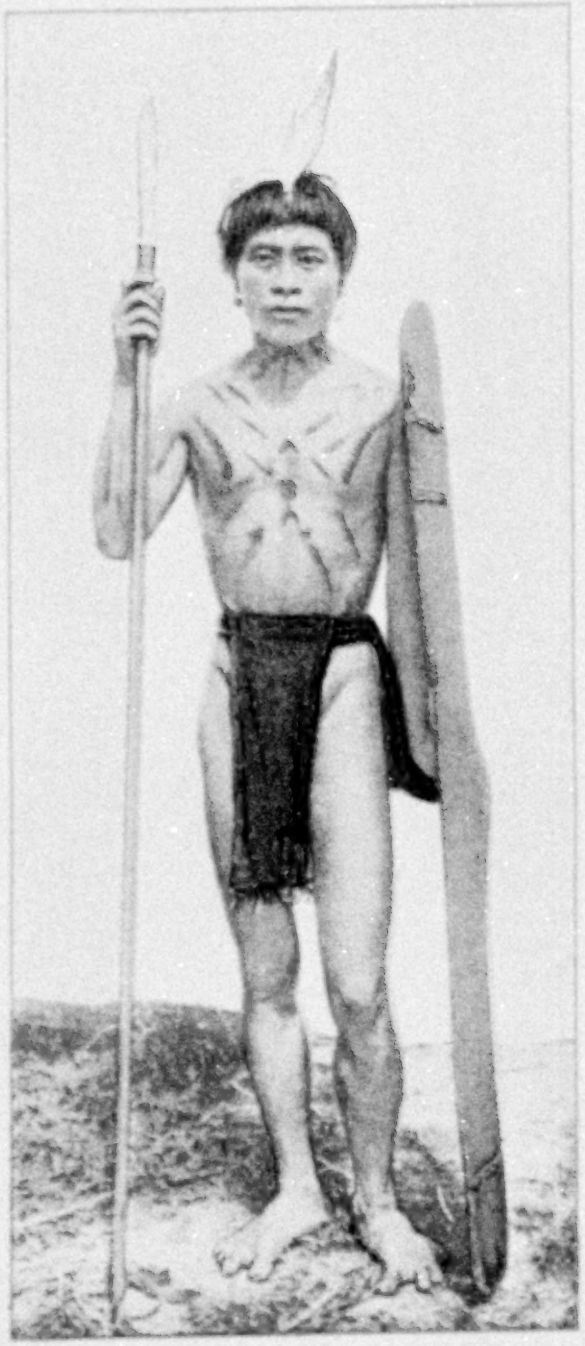
The Bilans are pagans who live in south Mindanao. They are exceedingly timid folk who take to the mountains, on the approach of a stranger. In consequence little is known about them.

A BUKIDNON WOMAN

A BUKIDNON MAN

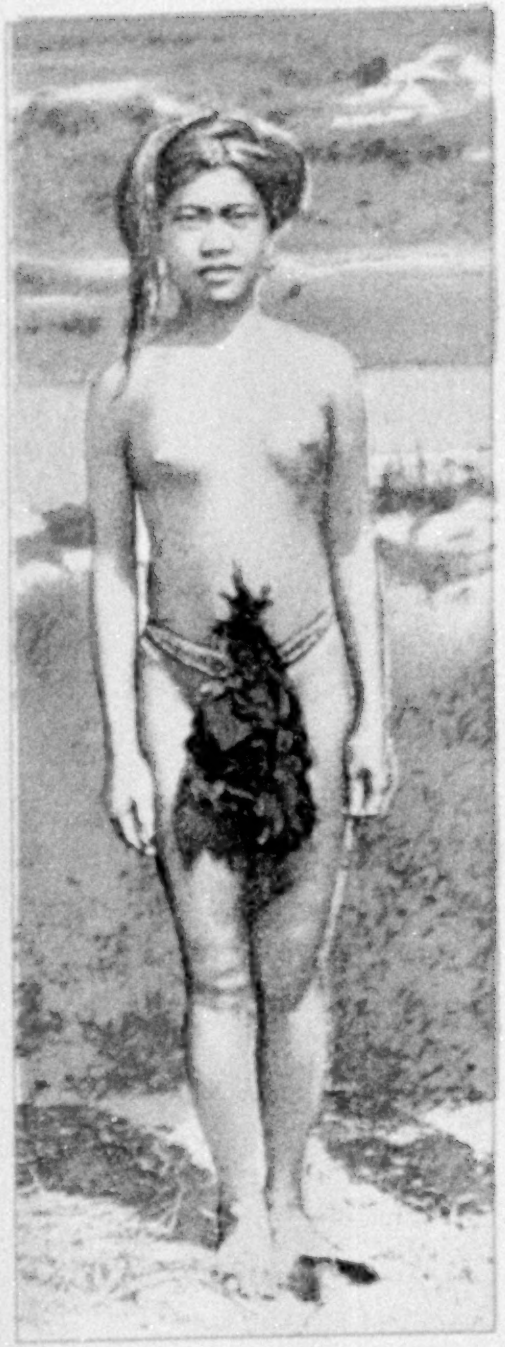
"In the past the Bukidnon people have preferred to live scattered through the mountains in isolated families or small groups. . . . . Since the American occupation almost all of them have been persuaded to forsake the forest clad mountains in favor of the level, fertile plains, where they have built good houses grouped in beautifully kept and sanitary villages."

XUM



AN IFUGAO WARRIOR

The Ifugao are a branch of the Igorot nation who inhabit a small and exceedingly mountainous region in northern Luzon. They tattoo their chests, necks and arms and sometimes the thighs and their dress is both scanty and somber. Note the prehensile toes of this man.



A BONTOC IGOROT WOMAN

She is in working dress. This costume, suggestive of the style prevalent in the days of Eve, is commonly worn by Bontoc Igorot women during rainy weather or when working in the field.

A YOUNG ATÁ

The Atas are a small tribe, scattered over a tract of forest and mountain in the island of Mindanao. They are a wild people who have made but little progress, as yet, toward civilization.

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AN IFUGAO HOUSE

The Ifugao houses are raised from the ground by posts having projecting shoulders designed to prevent rats and other small animals from gaining entrance. Till a few years ago the Ifugao were persistent head hunters and the skulls thus obtained form, to this day, a prominent feature of house decoration. Sometimes they are used to form a frieze and at others they are enclosed in open-work baskets dependent from the eaves. Each house has two rooms, a living room and a storeroom, the latter situated in the roof.

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BENGUET IGOROT SCHOOL GIRLS

Educational work among the Igorots of Benguet has made great strides, especially as regards industrial training, and many of the girls have shown great aptitude for cloth weaving and a desire to teach the art to their neighbors.

A MANDAYA WARRIOR

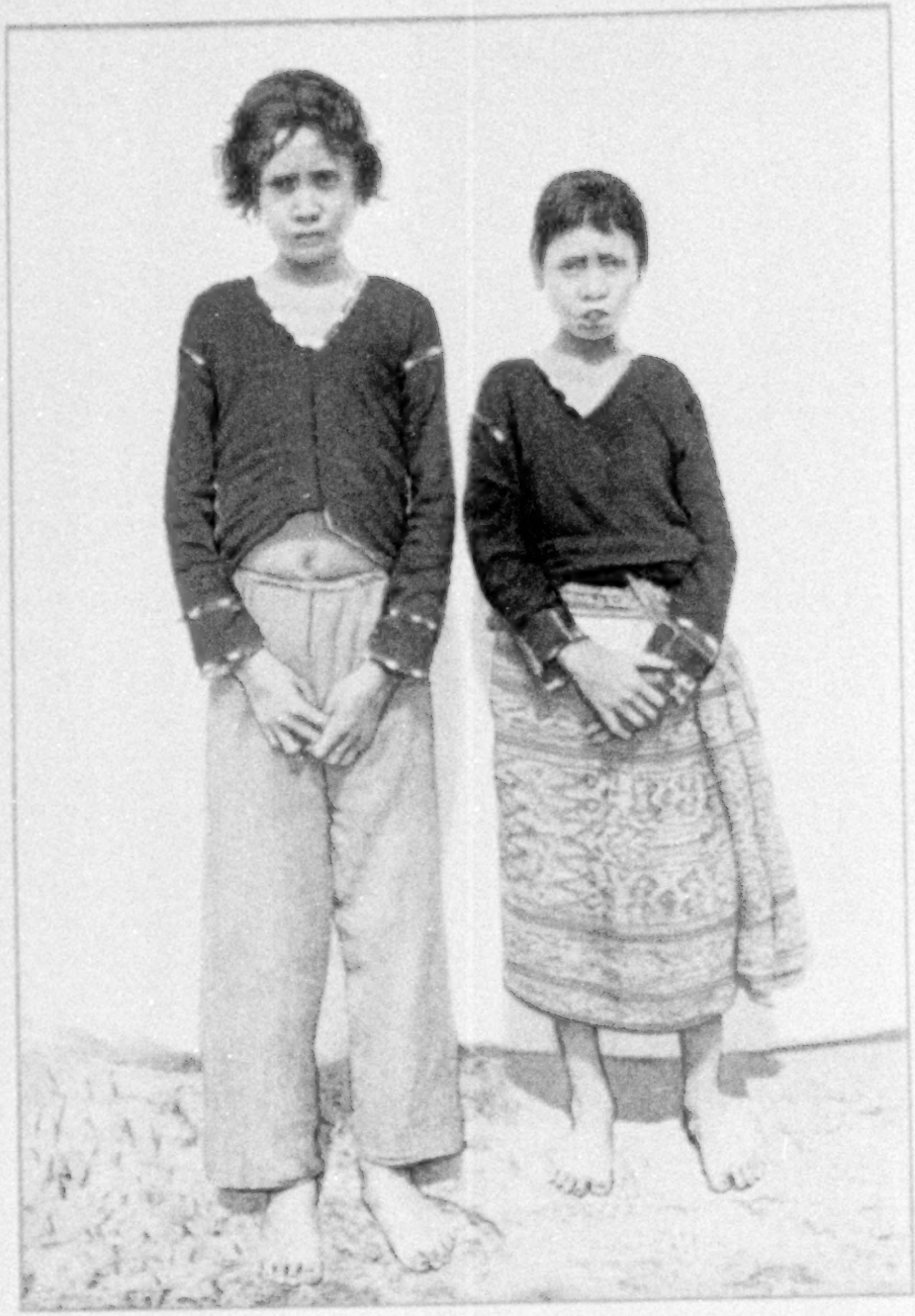
There is a close affinity in manners and customs between the Mandaya and the Bagobos. Both are tribes from the Gulf of Davao in Mindanao, both offered human sacrifices, but the Mandaya as far as can be learned have never been cannibals. A death caused by accident or design is followed by a blood feud and a Mandayan will wait for years for an opportunity to spear or *bolo* his enemy. Freedom from the feud may be obtained by paying the "death price," a sum in money or stock (usually a horse), equivalent to what they consider a man's life to be worth. The Mandaya are about twice as numerous as the Bagobos, the tribe numbering some 30,000 souls.

A MANDAYA WOMAN

Note the silver "patina" on her breast, and the load of armlets. The Mandaya women blacken their front teeth by holding a quid of tobacco and strongly acid leaves between teeth and lips.

CHRISTIAN MANOBO WOMAN

The dress of some of the Manobo women is so like that of their Mandaya neighbors that at first sight it is hard to tell the difference. Both are very fond of the blue jacket and the contrast of the yellow or red skirt and both wear many heavy armlets. This is not surprising as the two tribes dwell next to each other and there is constant trading between them. This woman belongs to one of the few Christian settlements.



MANOBO MAN AND WIFE

The Manobo are a tribe of northeast Mindanao living along the banks of the river Agusan and its tributaries, the third largest river in the Philippines. They frequently act as middlemen between the tribes of the interior and the Chinese and Moro traders of the coast. Note the pad for blackening the teeth held between the woman's lips.

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TWO MANOBOS AND A BUKIDNON

The latter has adopted civilized garb. Note the unusual height of the man at the right. The Manobos kept slaves, and occasionally indulged in human sacrifice, but that is now a thing of the past.

A MANOBO WARRIOR

The Manobos, like most of their neighbors in Mindanao, had a passion for killing, but they bear no resemblance to the fierce head hunting tribes of northern Luzon. Constant pressure on the part of the Moros, however, still keeps them in fair fighting trim.

LEPANTO IGOROTS AND THEIR HOUSE

Several distinct types of houses are found among the Igorots. The commonest type in Lepanto, shown here, has the curious high roof, within which is a storeroom. The floor is of dirt, enclosed by a wall of boards which does not reach up to the overhanging roof. The inhabitants have individual sleeping boards which they lay on the damp ground. Some of the Lepanto Igorots have even more primitive houses than this, being made of nothing more substantial than grass. On the whole the Igorots are an exceedingly filthy people, but of late years, they have shown a tendency to improve in this respect.

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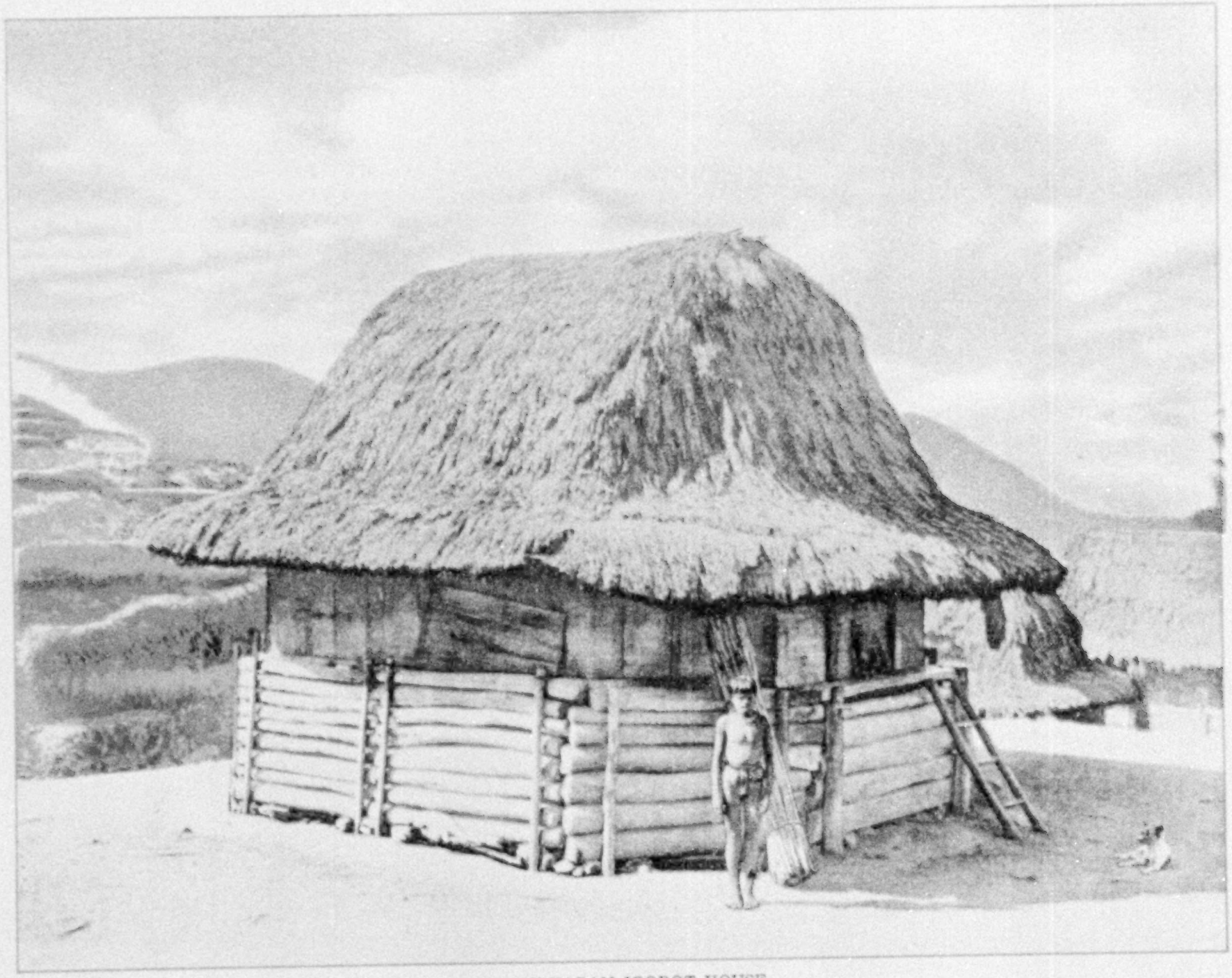

A LUBUAGAN IGOROT HOUSE

This picture shows one of the better types of Igorot dwelling, built on piles and obtaining better ventilation by being elevated above the ground. The floors laid with split bamboo are far more sanitary and comfortable than those made of earth. The pig pen—an important feature in an Igorot village—is a sunken pit on one side of the house, near which is a hole through which the animals can retreat to the walled-in space beneath the floor of the dwelling.

SON OF A FAMOUS MANOBO CHIEF

This young man is a typical Manobo dandy, observe the care with which the head-dress of red tassels is made to match a girdle of the same material, while the five great silver *patinas* on the breast marks the man of wealth and position.

A MANOBO WOMAN

The Manobos are believed to number about 60,000 people of whom some 2,000 are civilized. The latter are found in the province of Davao and most of them are Christians. They are the result of the activity of the Jesuits, who, in the last years of the Spanish rule, formed settlements for their converts and taught them how to till the soil.

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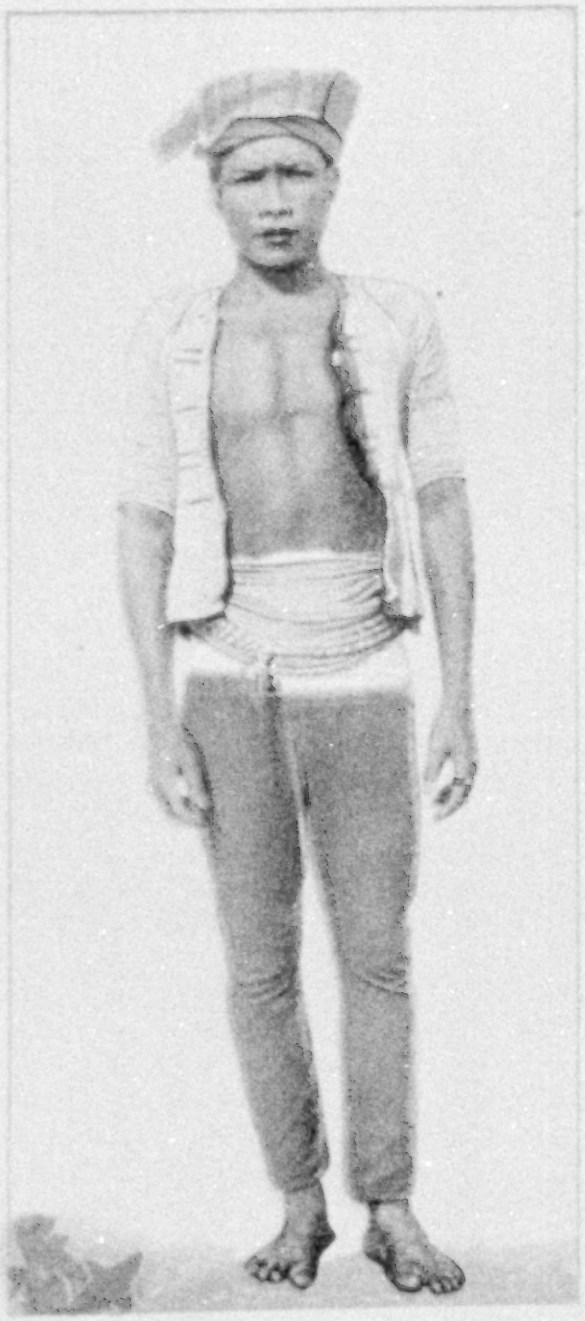

A SUBANO MAN

SUBANO WOMAN AND CHILD

The Subanos, numbering about 30,000, live in the western part of Mindanao and are completely dominated by their Moro neighbors to whom they pay tribute. They are a timid industrious folk, the men are capable agriculturists and the women are skilful weavers and basket makers. At about the age of 15 both men and women commence to file and blacken their teeth which in about 10 years are ground down to the gums.

A MORO DATO

The Moros are a Mohammedan people, governed by sultans of their own, called *datos*, who seem to exercise an almost unlimited power and are notorious for their cruelty and extortion. The *datos* have given endless trouble to the American authorities.

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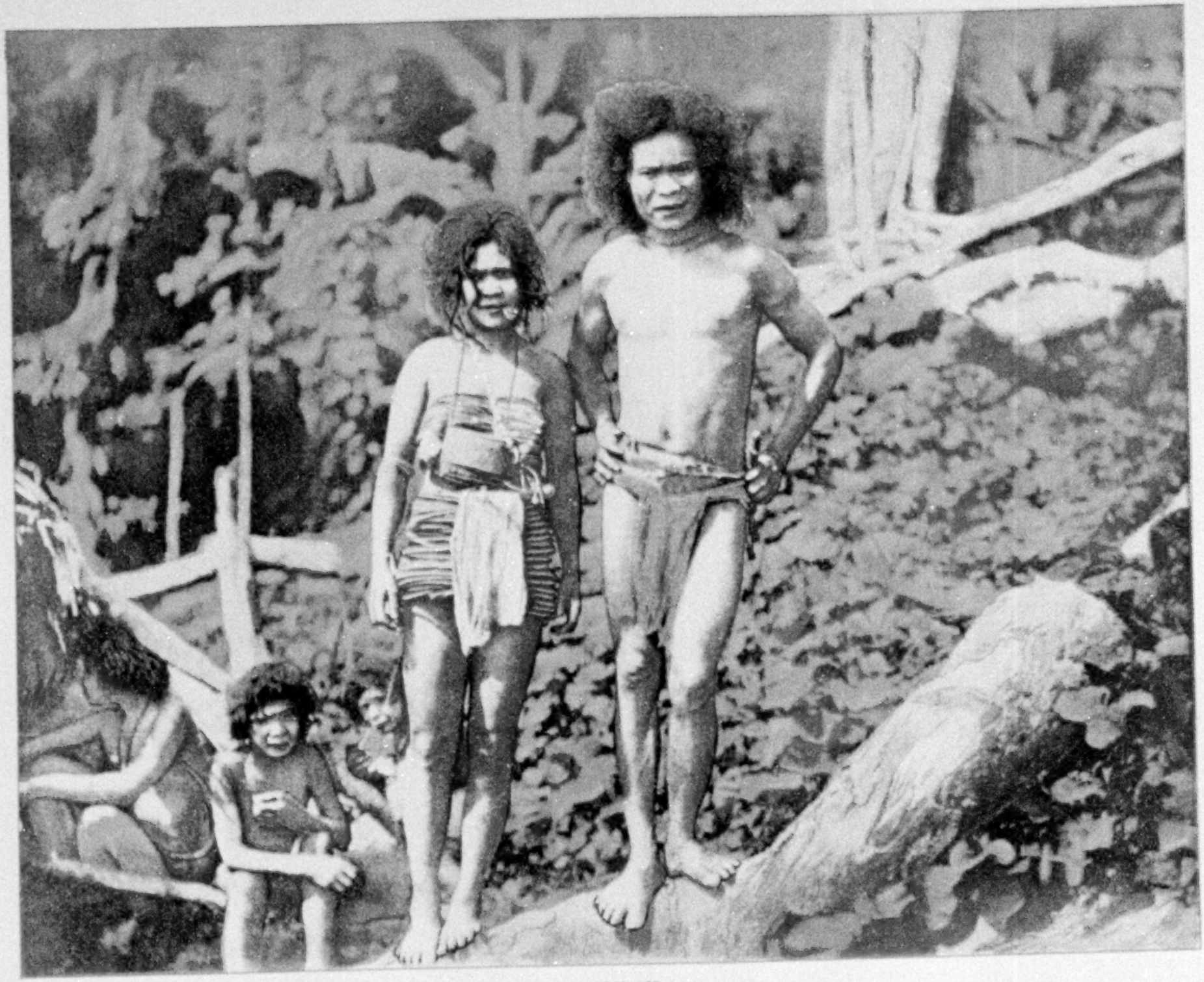

MANGYANS

This is a wild people of the mountains of Mindoro, very much lighter in color than other Philippine tribes. This is probably due to the fact that they have lived for generations in the depths of the forests, though there is a tradition, probably of no value, that they are descendants of some white race. They are a nomadic people having no idea of agriculture or of the value of money. Exceedingly timid, they take to flight on the approach of a stranger.

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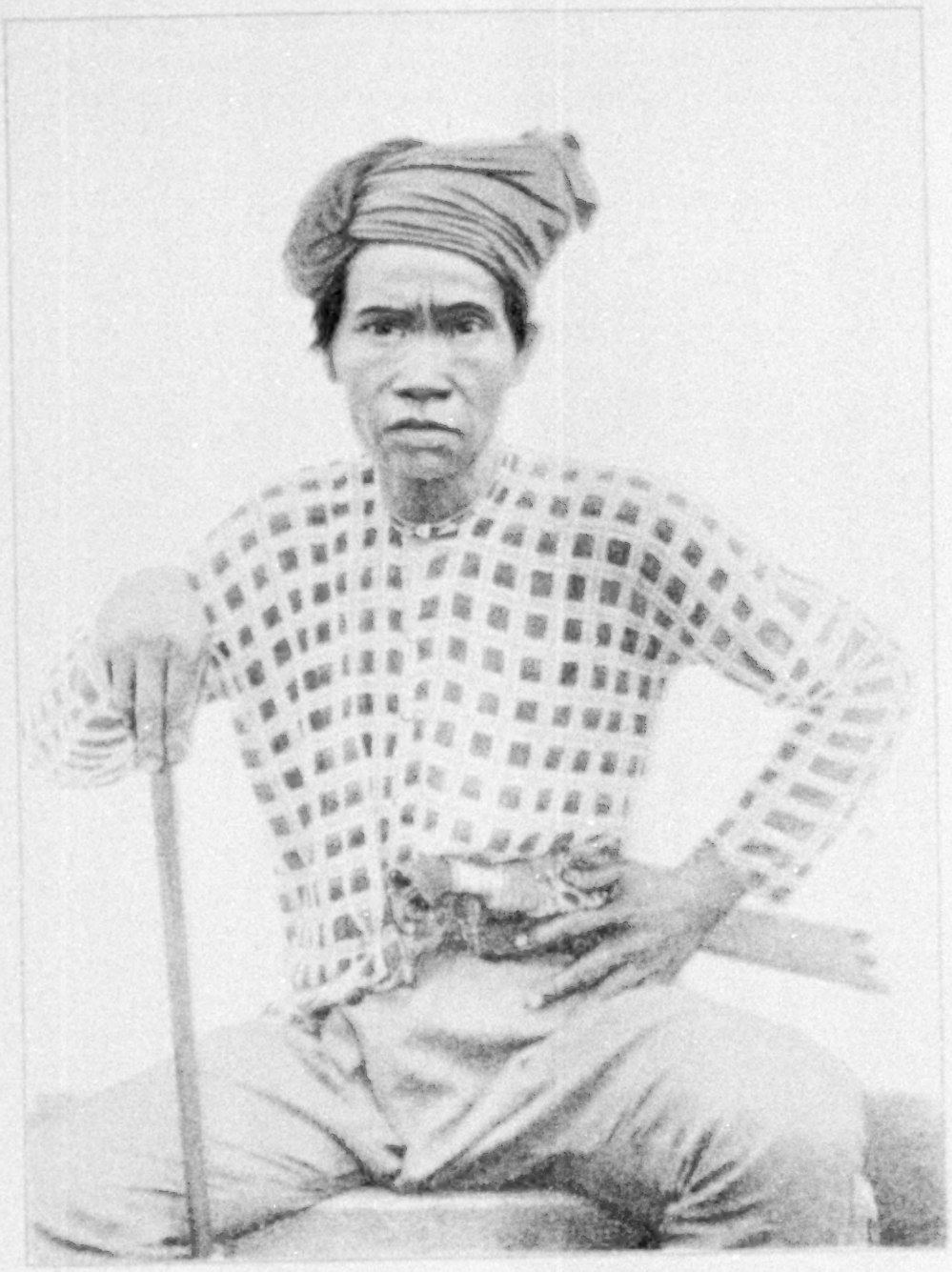
ILONGOT WOMAN AND GIRLS

The Ilongots are a small tribe, probably less than 6,000 in number, living in northern Luzon. They are forest dwellers in the strictest sense of the term, living in small groups in the woods and moving their villages very frequently. They build fairly large bamboo houses of primitive design, elevated from 6 to 9 feet above the ground, before the door there is usually a wide bamboo platform like that shown in the picture.

A NEGRITO

The original inhabitants of the Philippines were the Negritos, of whom about 25,000 still remain. They are a pigmy people, the tallest man being seldom above 4 feet 10 inches high. They are a curious dark brown or black in color, have woolly hair and can use their toes almost as well as their fingers. These people are probably the lowest type of human beings known and have been described as "not far above the anthropoid apes."



A TAGAKAOLO

Living to the south of the Bagobos on the west side of the Gulf of Davao in Mindanao are the Tagakaolo, a small tribe having a height greater and a physique finer than most of the tribes of that island. Little or nothing is known about them.

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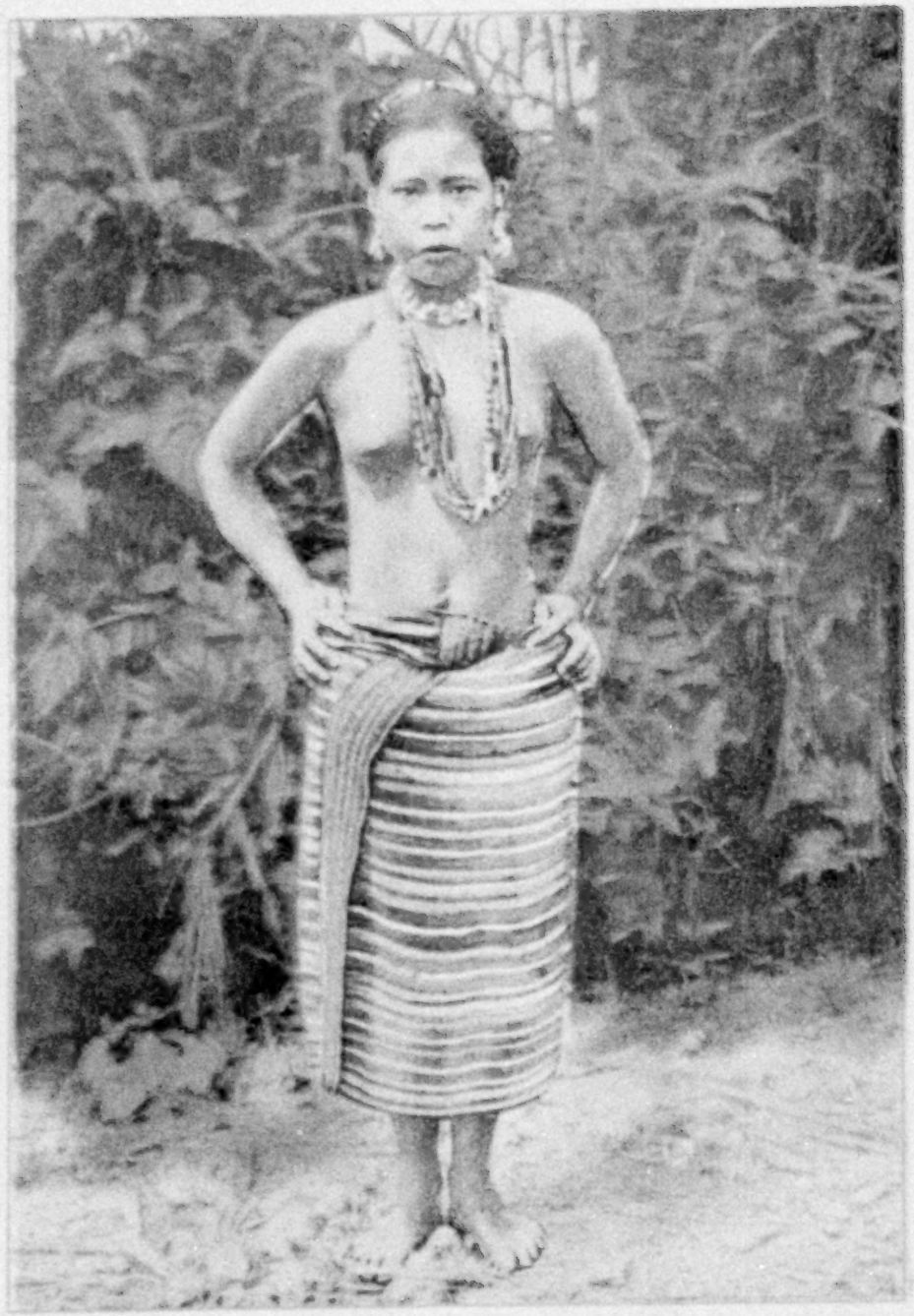


A LUBUAGAN IGOROT WOMAN

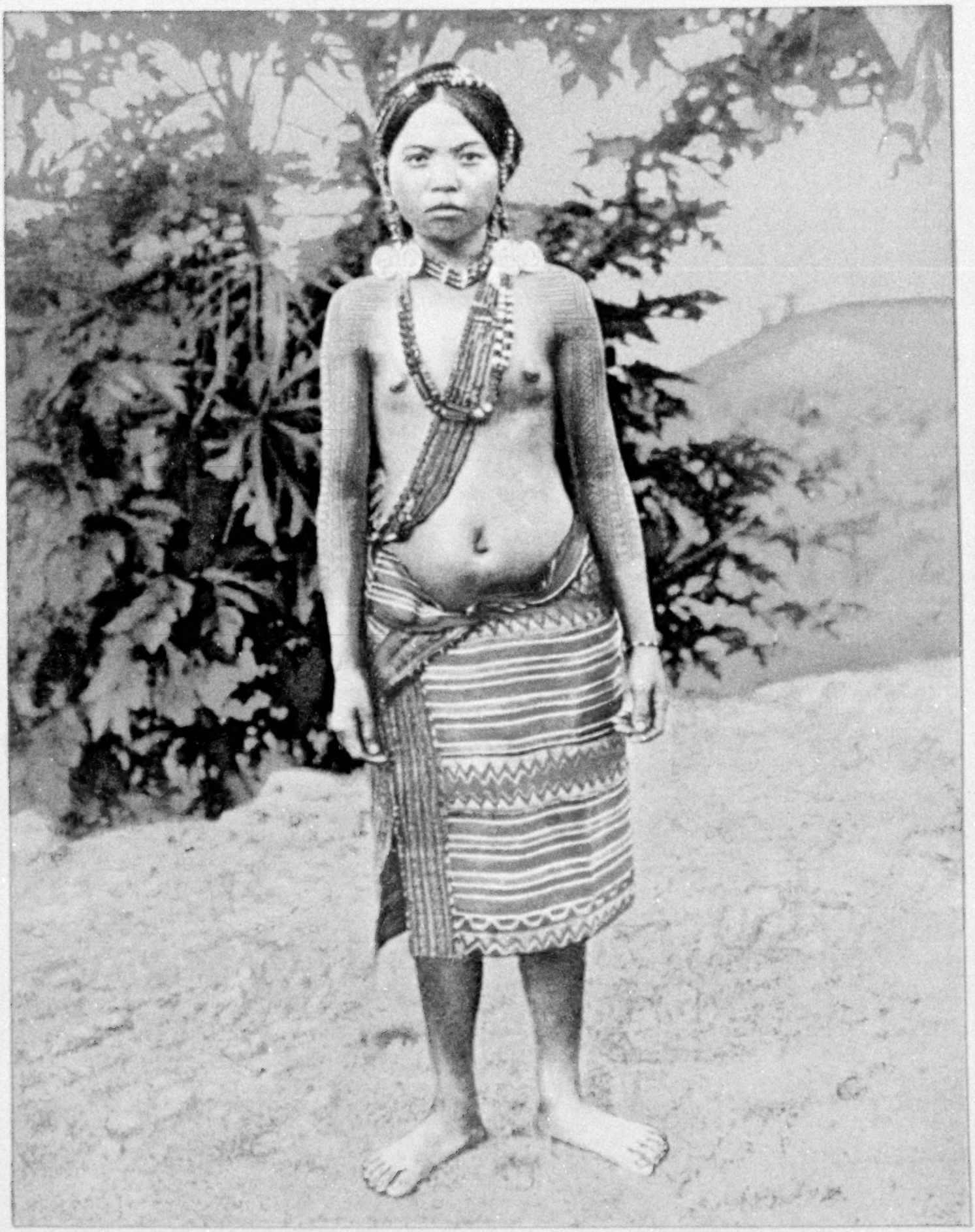
Her skirt bulges out at the waist where it is supported by a "form improver" made of woven rattan. Members of this tribe are often referred to as Kalingas, but they differ from that race in certain essential particulars, although they probably have a good proportion of Kalinga blood.

A LUBUAGAN IGOROT WOMAN

She is in festal attire and has her face painted after a fashion strictly confined to the people of this region. These people dwell in a sort of "No Man's Land," where the territories of the Kalingas, Igorots, Ifuagos and Tingians meet.

A YOUNG ILONGOT WOMAN

The Ilongot women show great ingenuity in their dress considering the fact that they belong to a tribe so primitive that they are unable to count beyond ten. They embroider with surprising skill, and fashion elaborate necklaces and girdles of cowries strung on colored cloth. Bells are greatly prized by both men and women and are worn at the girdle or hanging from the necklace. Head ornaments of white horse hair are their passion and they will go to any length to obtain the coveted material, which they use very tastefully as can be seen from the picture.



A KALINGA WOMAN

This tribe—whose name literally means "Enemy"—is of mixed Malay and Negrito origin. They live in northern Luzon and number some 76,000, and were formerly inveterate head-hunters. They have high cheek bones and eyes shaped rather like those of the Chinese, but set level and usually far apart.

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TIRURAY WOMEN

In the west of Mindanao is a small tribe called the Tiruray, who dwell between the Moros and the Bilans. They do not understand the arts of spinning and weaving and so depend upon their Moro neighbors for their clothes. The women wear the *sarong* or loose skirt with a very tight jacket. Around the waist are girdles of spiral brass pieces embellished with beads, and their ankles are loaded with brass rings. They blacken and file the teeth and frequently color their lips a vivid red. The tribe is poor, having no industries, and depend upon their crops of rice, corn and sweet potatoes, which they produce by the most primitive and laborious methods of husbandry.

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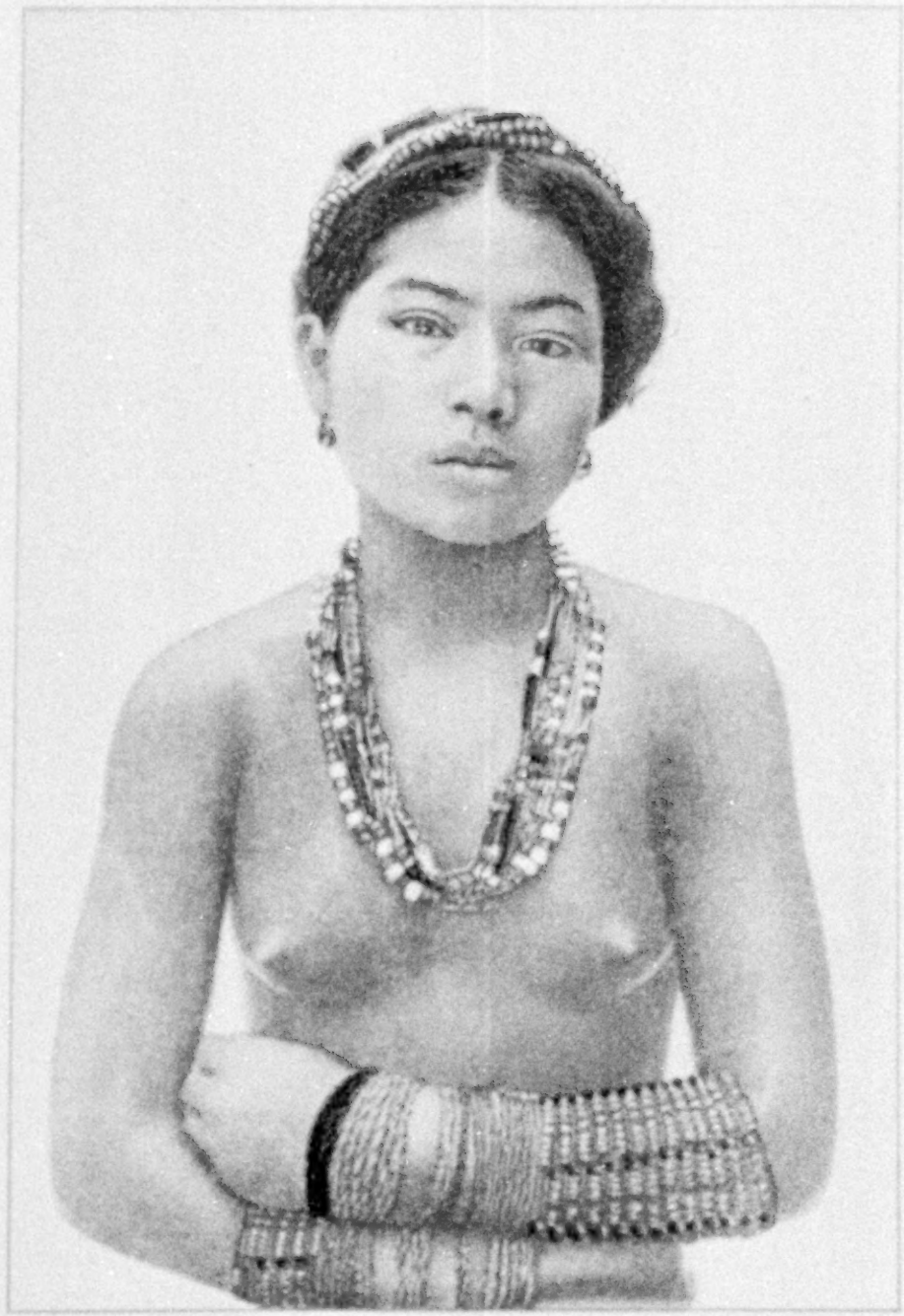
A TINGIAN GIRL

Alone among the head hunting tribes of Luzon, the Tingian women are careful never to expose the upper part of the body, the sole exception being during the period of mourning when no upper garments are worn. They are inordinately fond of bead necklaces and of large silver ear ornaments, some of them being very beautifully made.

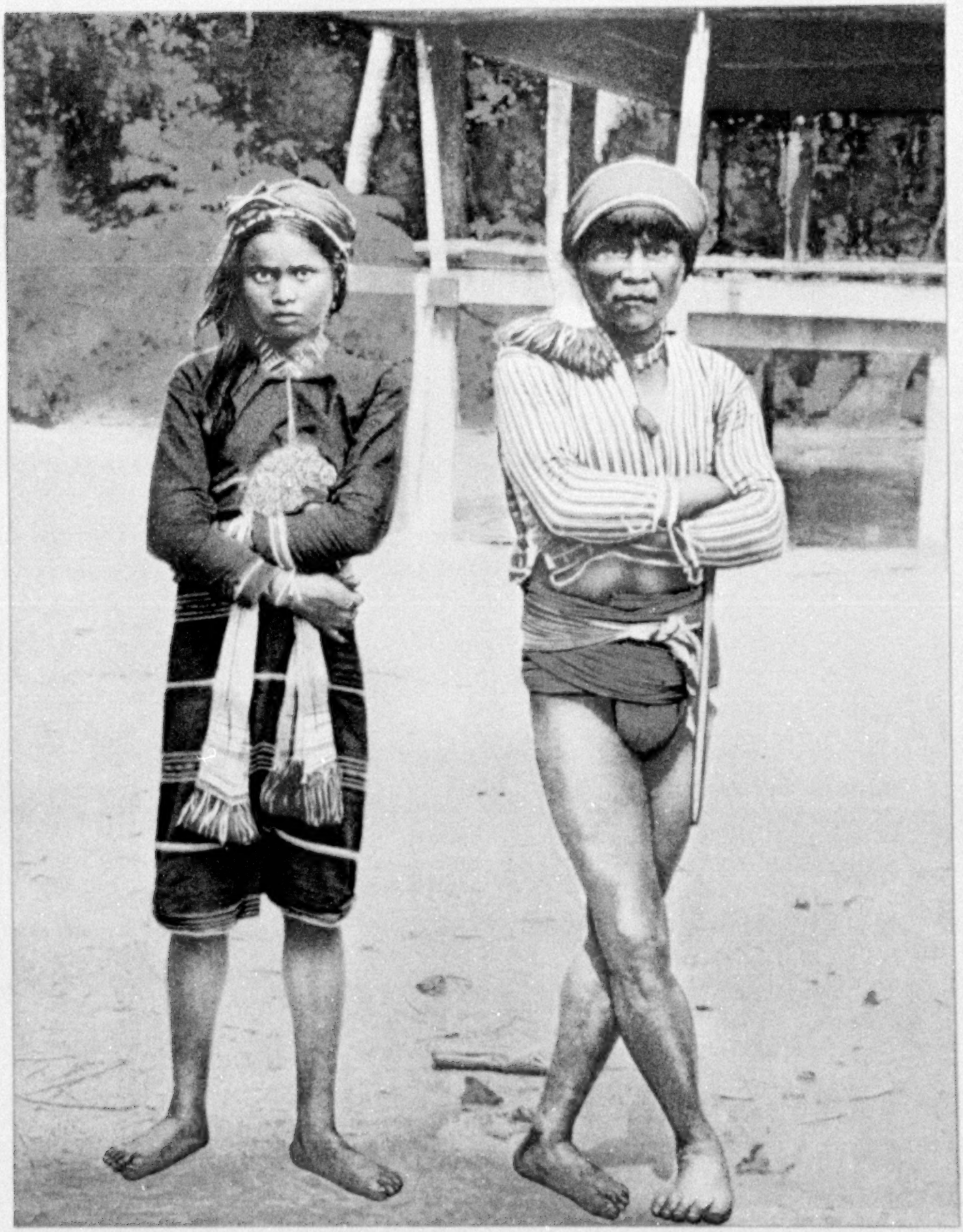


A TINGIAN GIRL IN MOURNING

She belongs to the more civilized branch of the tribe. Note her peculiar arm ornaments and the constriction of the forearm which they produce. This is considered very beautiful.

AN ILONGOT FAMILY

Unlike the women who are rather partial to clothes, the Ilongot man seldom wears more than a loin cloth. He is a skilful hunter depending on the chase for his supply of meat, and with bow and arrow tracks down deer and wild hogs which are abundant. Agriculture is left to the women who grow sweet potatoes, the principal article of food, a little rice, corn and bananas. The men distil a kind of rum from the sugar cane and are very fond of intoxicating liquor. Each village is generally at war with the next and fighting is conducted by ambush, never in the open. Poisoned arrows are used and they set spiked bamboos and spring guns for their enemies in places which are likely to be crossed.



WILD TINGIANS OF APAYAO

This tribe is noted for the affection existing between husband and wife and for the high moral tone of its women. Their mourning customs are peculiar. A widow discards her upper garments, fasts, and does not bathe for a period of six months, but the period may be terminated by offering the head of an enemy to the spirit of the dead man, a ceremony which is supposed to insure peaceful rest in the hereafter.

A TINGIAN MAN

Although a comparatively civilized race the Tingians have been classed as head hunters, for generations they have had to fight for their existence against the Igorots and the Kalingas and they may have acquired this habit from their enemies. They show great skill in the use of the lance a typical example being shown in the picture. Note the curious hat and the waterproof cape made of plaited straw.

A MORO BOY

The son of Dato Bata Rasa seated on the knee of Captain E. G. Miller, who lost his life while serving as Governor of Palawan. The Moros are found in their greatest strength in the Island of Mindanao and the Sulu Archipelago. They are unexcelled pirates and slave traders, treacherous and unreliable to the last degree. The whole race numbers about 300,000, has never been brought under complete control and its pacification presents one of the most difficult problems before the Philippine government.

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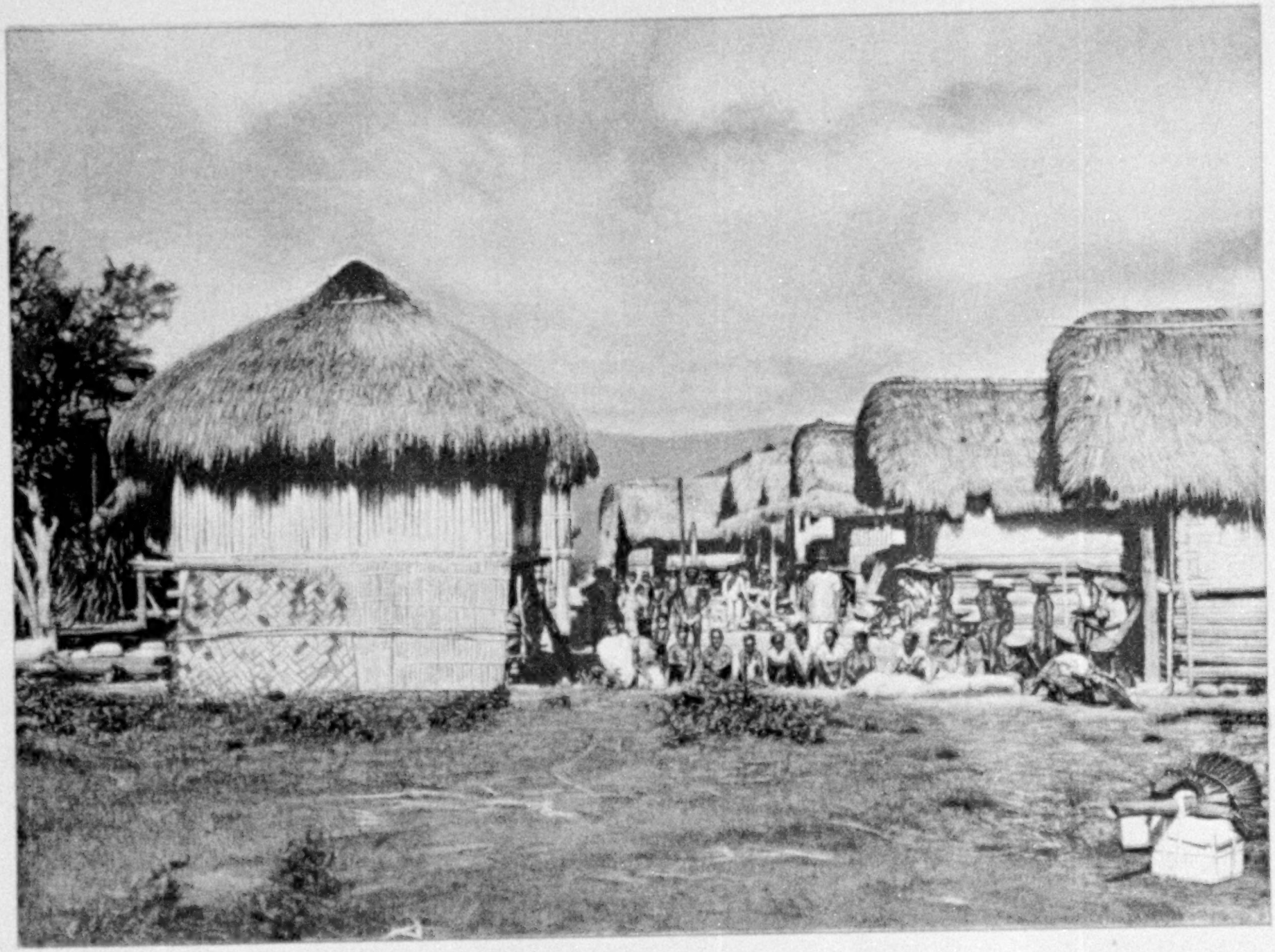

THE TINGIAN VILLAGE OF TUI

Although they cling tenaciously to the beliefs of their forefathers, the Tingians are in many respects as highly civilized as many of their Christian neighbors. As befits one of the cleanest of peoples their well built villages are always placed on high, sanitary sites and the inhabitants are an orderly, law abiding folk. This tribe are skilful agriculturists and raise horses and cattle for the market and in consequence many of them are fairly well-to-do.

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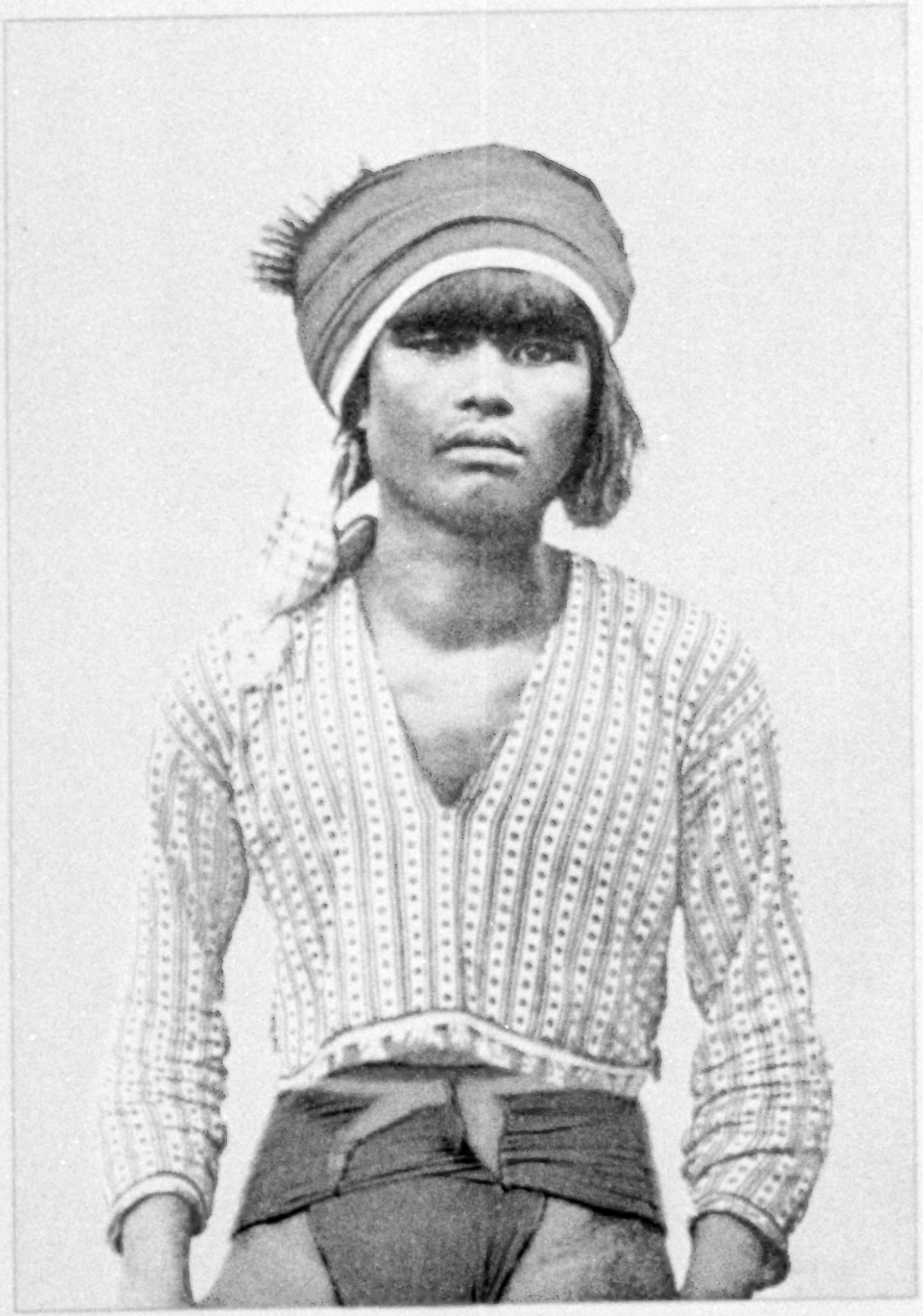
A WILD TINGIAN GIRL OF APAYAO

Note the peculiar mother-of-pearl ornaments and the blade of the miniature headaxe thrust into the hair. Among this tribe a blue thread tied around a girl's ankle is a sign that she is unmarried.



A WILD TINGIAN OF APAYAO

The Tingian man's loin cloth is almost invariably blue and in his upper garments he exhibits a decided partiality for gay colors, especially for red and yellow, two colors usually combined in his turban. As a rule he does not cut his hair and is not above supplementing the natural growth by such a feminine addition as a switch.

A TYPICAL KALINGA COUPLE

These people are the Peacocks of the Philippines. They revel in the brightest colors and bedeck themselves in large figured, gaudily colored cotton fabrics. The women have skirts reaching well below the knees and are often loaded with necklaces of agate beads which they greatly prize. On state occasions the men ornament their hair with tufts of scarlet feathers and bunches of hibiscus flowers or marigolds. Note the small waist of the man.

PADDING AS ARMOR

A Bukidnon warrior equips himself in a sort of rude armor, consisting of garments thickly padded with *kapok*, or tree cotton, held in place with yards upon yards of strong cotton cloth (see page 1164). War-knife and lance are the offensive weapons, while a large wooden shield of characteristic form is used for defense.

The Bukidnons love music and dances, in which women and girls very gracefully manipulate kerchiefs or shawls between their extended fingers, moving with a peculiar gliding step wholly different from anything to be seen among other Philippine tribes.

A distinguished visitor upon approaching a Bukidnon town is usually met by a fully armed warrior, who brandishes a formidable lance with a bell on the end of its long handle. This dangerous-looking individual dances about in a most astonishing fashion, making faces, thrusting out his tongue, and shaking his lance as if about to run one through. Though expected to smile appreciatively at this rather alarming display, a man can usually not quite forget how absolutely he is at the mercy of an armed savage.

Nearly all the Bukidnon villages have well-attended schools and are connected with telephone lines, which are freely used. The people are converting their beautiful and naturally rich country into a checkerboard, with roads and trails for dividing lines. They are giving up their picturesque native costume so rapidly that typical garments are even now hard to obtain—a fact which is to be regretted, as the garb of the Filipinos which they are adopting is not more modest or more serviceable and is far less picturesque.

THE BULANGANES

The Bulanganes inhabit a forested and mountainous region in southern Mindanao extending over some 45 miles from Tamontaca toward the southeast coast.

The Jesuits say of them that they are so savage and fierce that even the Moros are afraid of them and call them bad people.

They constitute a tribe of doubtful validity, included here solely on the authority of Jesuit missionary priests. It is highly probable that a careful study of the peoples living in the vicinity of the Gulf of Davao will result, as such a study has resulted in northern Luzon, in greatly reducing the number of recognized tribes.

THE GUIANGAS

The Guiangas, who inhabit the northern and eastern slopes of Mount Apo and the River Mala and its tributaries, in the district of Davao, are said by the Jesuits to be in all respects similar to the Bagobos, although they speak a peculiar dialect. According to the Jesuit Father Gispart, who did missionary work among them, they number approximately 6,400.

Although I have seen them only once, I venture to express doubt as to whether they are really tribally distinct from the Bagobos. I think it more probable that, as in the case of the two groups of Benguet Igorots speaking Kakanai and Nabaloi respectively, this is a case of two sections of one tribe with more or less distinct dialects.

THE IFUGAOS (SEE PICTURES, PAGES 1167, 1168, 1216, 1218, 1224, AND 1246)

The Ifugaos are a powerful, warlike, head-hunting tribe, numbering at present 125,000. They inhabit a very mountainous but for the most part unforested region in the central part of northern Luzon, which formerly constituted the northwestern portion of the province of Nueva Vizcaya, but has not been made a subprovince of the Mountain Province and bears the name of the tribe.

Although the men are not large or heavily built and many of the women are comparatively small, they are a healthy, vigorous, well-muscled, and comparatively cleanly people.

The ordinary dress of the men is a long, dark-blue clout, with or without white stripes or scarlet figures. In addition, men who can afford to do so often carry more or less elaborately woven blankets. Their chests, necks, and sometimes their legs are ornamented with tattoo patterns peculiar to the tribe (see page 1167).

Their hair is worn in a highly characteristic fashion. One is tempted to sus-

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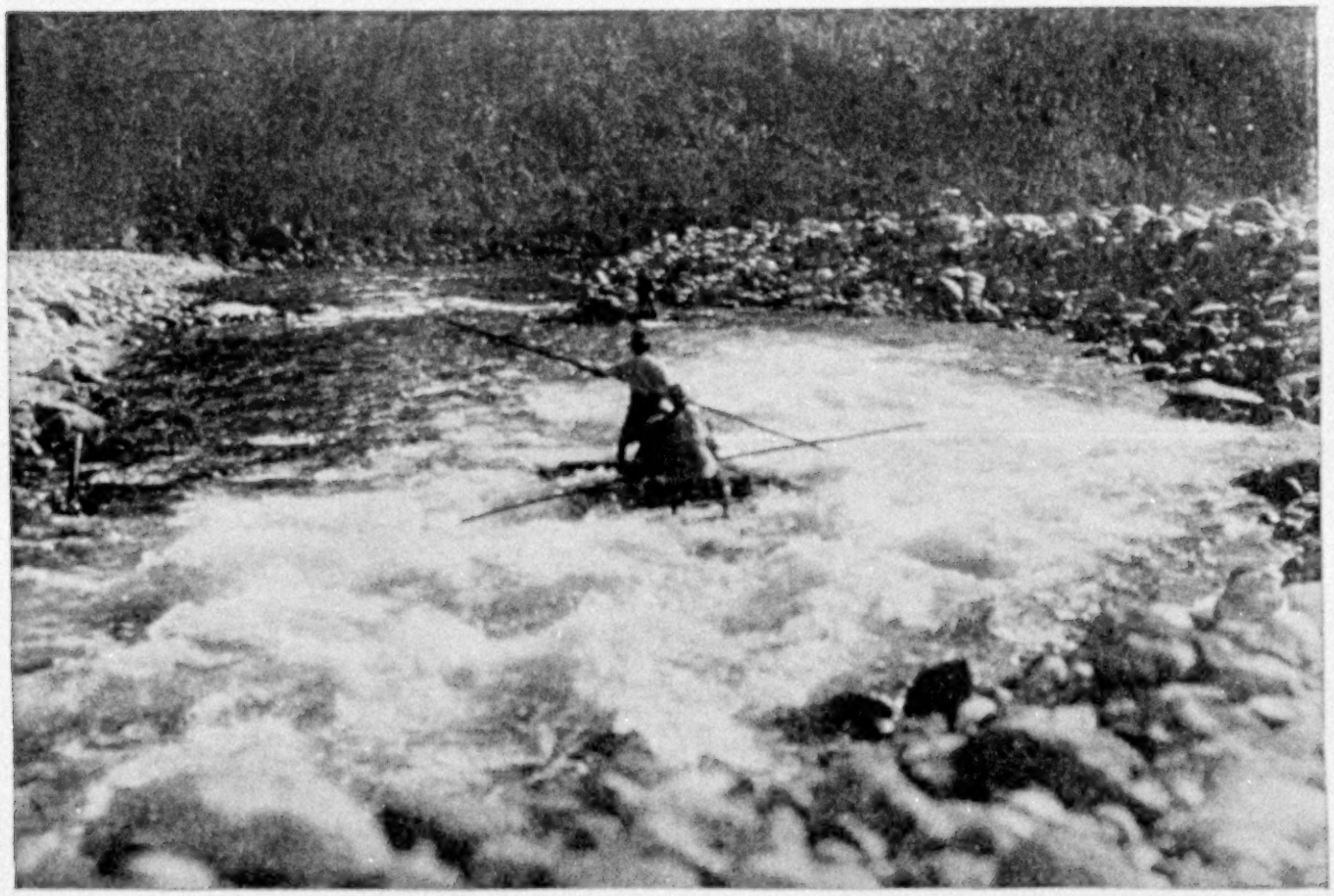
SOME OF THE MEN WHO HAVE ESTABLISHED ORDER AMONG FOUR HUNDRED THOUSAND SAVAGES IN THE MOUNTAIN PROVINCE OF LUZON

From right to left they are: Lieutenant Governor Evans, of Bontoc; Lieutenant Governor Eckman, of Benguet; Engineer Officer Kane, Lieutenant Governor Gallman, of Ifugao; Lieutenant Governor Hale, of Kalinga; Secretary Worcester; Governor Pack; Treasurer Olson; Lieutenant Governor Early, of Amburayan; Captain Hunt, Philippine constabulary; Lieutenant Governor Miller, of Lepanto, and District Health Officer Moss.



TRAVELING BY RAFT IN THE PHILIPPINE ISLANDS

"On one of my early trips four different rafts were dashed to pieces under me in two days, but I suffered no serious injury" (see text, page 1240)

pect that in cutting it a bowl is jammed down on the shock head to be barbered and the hair outside it first cut short and then shaved off. Huge ornaments of brass are often worn in the ears and spirals of highly polished brass wire adorn the legs above the calves. The *cabecillas*, or petty chiefs, and some other wealthy individuals as well, wear highly ornamented girdles made from the opercula of certain marine shells.

The costume of the women is even more simple than that of the men, consisting solely of a very abbreviated skirt somewhat precariously held in position by being wrapped around the body far below the waist, and indeed often *under* the abdomen. This skirt frequently fails to reach the knees of the wearer. A fold in it near the hip answers for a pocket. Brass ear-rings and simple strings of beads worn about the neck or in the hair complete the ordinary costume of the women, who may nevertheless wear blankets if they are fortunate enough to possess them. The women tattoo their arms, and more especially their forearms, following a fern-leaf pattern never to be seen among the people of any other Philippine tribe.

SKULLS AS DINING-ROOM ORNAMENTS

With few exceptions, the people of this tribe live in very small, compact villages strategically placed among steep-walled rice terraces so as to be easily defended. Their windowless, neatly built houses are placed well above the ground on strong posts, which are often rudely carved. Access to them is had by means of light ladders, which are drawn up at night. Each house has two rooms, one above the other, the higher of which extends into the peak of the roof and is used as a storeroom. Each house has a rude fireplace, over which may be placed the skulls of wild pigs and deer and those of carabaos eaten at feasts, as well as the skulls of enemies killed in war.

Famous head-hunters often have tastefully arranged exhibits of skulls on shelves beside the doors of their houses, hanging in baskets under the eaves, or extending around their houses in ornamental friezes at the floor level (see page 1168).

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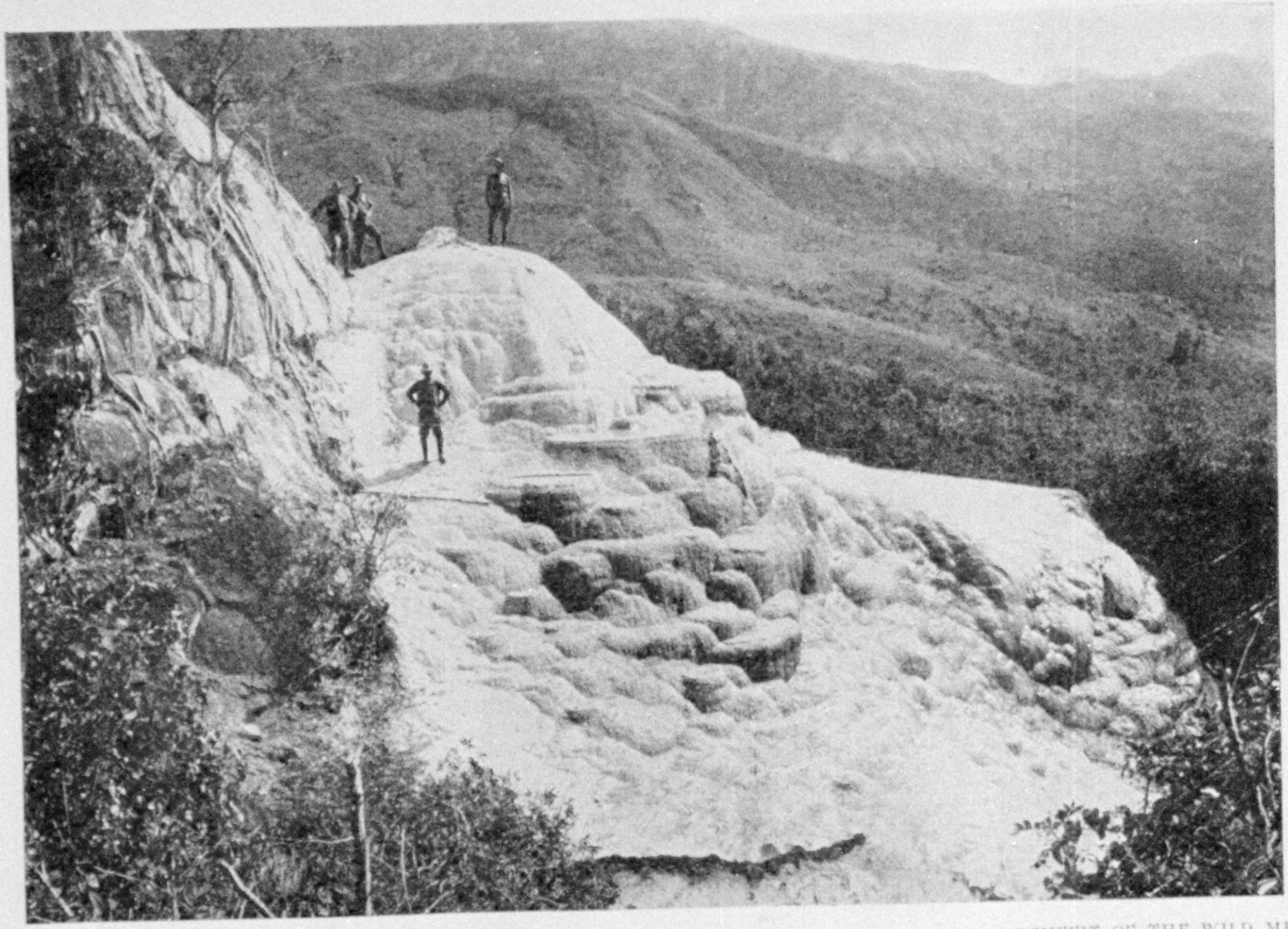

THE GREAT SALT SPRING AT SALINAS, NUEVA VIZCAYA, WHICH IS NOW BEING DEVELOPED FOR THE BENEFIT OF THE WILD MEN OF NUEVA VIZCAYA AND OF THE MOUNTAIN PROVINCE

PRIMITIVE SALT WORKS

These works are operated by Igorots at Salinas, Nueva Vizcaya, and supply salt to some 20,000 people

The Ifugaos are very skillful in the raising of rice, which they grow on wonderful terraces constructed with infinite pains on the steepest mountain sides and irrigated by water brought in ditches which are often of considerable length (see the unusual photographs of these terraces in the NATIONAL GEOGRAPHIC MAGAZINE, September, 1912). The terrace walls are usually made of dry stones, and the skill and industry which these comparatively primitive people have displayed in thus building walls 10 to 40 feet high, which stand up not only under irrigation water, but under the floods caused by terrific rain-storms, in which water sometimes falls for a day or more at the rate of an inch an hour, are greatly to their credit. Many centuries of hard, continuous work must have been required to construct these terraces. They must be seen to be appreciated, and the more one sees of them the more he appreciates the high degree of intelligence and the extraordinary industry of their builders.

Advantage has been taken of the natural ability of the Ifugaos to handle stone, and mere boys have readily been taught to split boulders, cut the stone thus obtained to the required dimensions, face it, and utilize it in the construction of dignified and imposing public buildings (see pages 1244 and 1246).

THE IFUGAOS ARE GOOD FARMERS

The Ifugaos cultivate their rice very carefully and raise splendid crops when irrigation water does not fail them. They also raise beans, onions, *gabi* (taro), and cotton on their terraces. *Camotes*, or yams, are planted extensively on the steepest mountain sides. Pigs and chickens are kept in considerable numbers, but as yet the Ifugaos have no cattle. On state occasions the wealthiest men sometimes purchase carabaos, which are turned loose to be cut down with war-knives by invited guests, each person being entitled to so much meat as he can slice off and get away with. Terrific scrimmages result, in the course of which men are often badly cut, but the injuries

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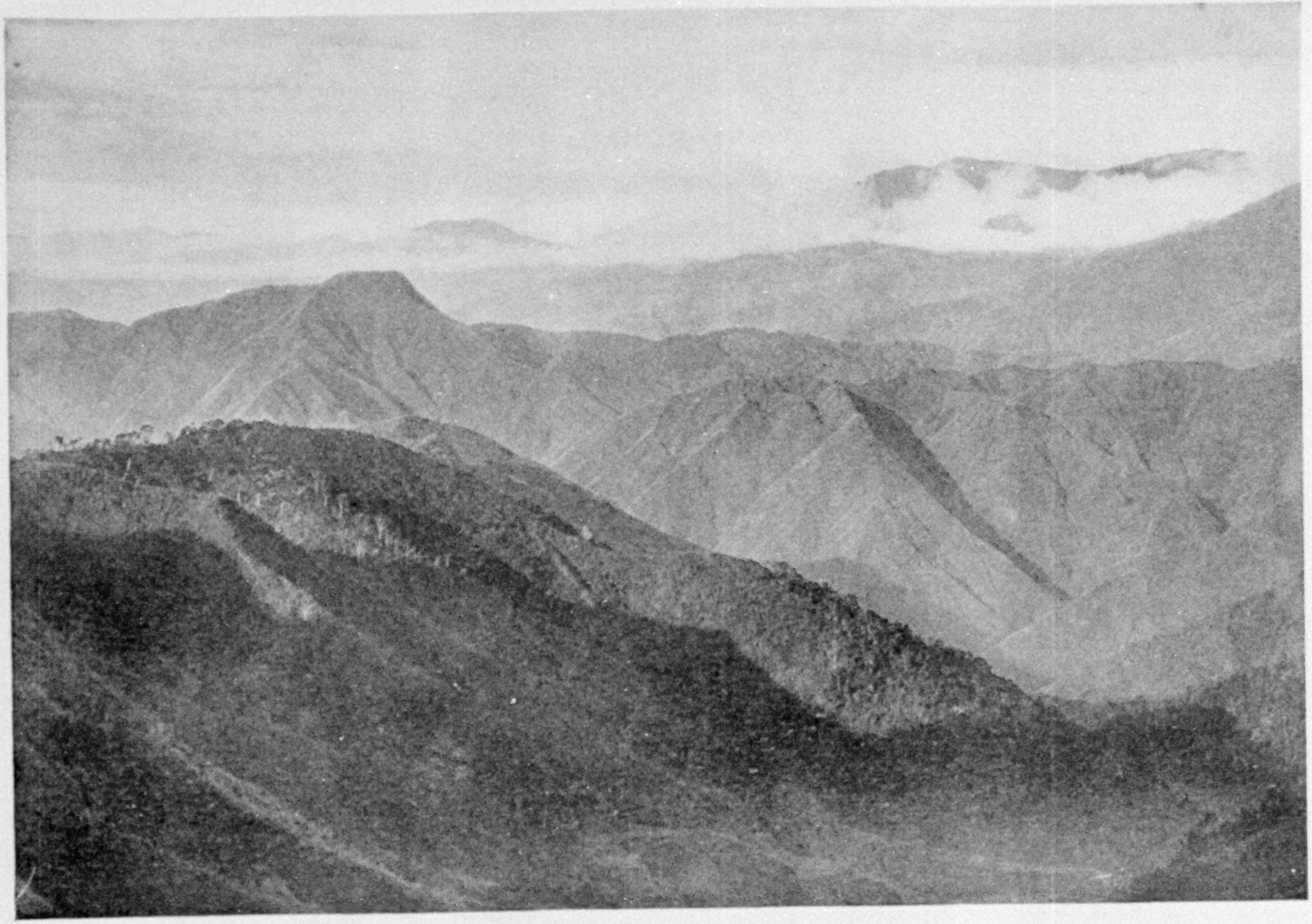


BUILDING TRAILS THROUGH COUNTRY LIKE THIS, WHICH IS TYPICAL OF THE MOUNTAIN PROVINCES, PRESENTS MANY DIFFICULTIES
(SEE PAGE 1243)

received on such occasions must be taken in good part (see photographs in the NATIONAL GEOGRAPHIC MAGAZINE, September, 1912). A man who complained over having a few fingers chopped off would lose caste as completely as would a football player who objected to being tackled hard (see page 1230).

The men of certain towns, and especially of Sapao, are skillful in working and tempering steel. They make excellent lance-heads and war-knives. They are the only people in the Philippines who do not naturally and normally eat with their fingers. The poorest Ifugao usually carries a wooden spoon in his clout and uses it in feeding himself. The handles of these spoons are often well carved in imitation of human figures. Striking-looking wooden bowls carved in imitation of hogs or carabaos are in fairly common use, while under the houses of what may be termed the Ifugao nobility huge carved *tagabi*, or resting benches, fashioned from single logs and capable of accommodating two or more persons stretched at length, are often seen.

Until American control was established over them, the Ifugaos were inveterate head-hunters, and their heavy burden of field work was necessarily largely performed by women or children, while their men did sentry duty on the hilltops or stood guard over them in the fields. It is now more than six years since a head has been taken in their territory, and the several settlements are not only on friendly terms with each other, but with the people of neighboring tribes as well.

EXPERT SHOTS AND EFFICIENT POLICE

When trouble threatens, they carry plain rattan-lashed board shields, which look ugly but are effective. Their offensive weapons are formidable *bolos* and steel-headed lances. They also use bamboo lances and a few of them have rifles. Today order is maintained throughout their territory by Ifugao constabulary soldiers, who speedily become expert rifle shots and have shown themselves to be brave, efficient, and loyal (see p. 1224).

The Ifugaos have only two musical instruments: a wooden drum with skin head, used in connection with certain ceremonial feasts, and the common *gansa*, or timbrel, which they play with consummate skill. They march to its music on the trail and dance to it on every possible occasion.

Their feasts are apt to be rather uproarious. They make an excellent fermented drink from rice, and on gala occasions are prone to partake of it rather too freely.

Today they show the utmost friendliness toward Americans. They have built splendid roads and trails throughout their subprovince, over which American women may and do ride in perfect safety.

Under a continuation of the present policy the Ifugaos will go fast and far on the road which leads to better things.

Their condition and customs in Spanish days have been accurately and quite fully described by Father Juan Villaverde, a Spanish missionary priest, who labored long among them and won their respect and regard. Had the policy which he recommended been followed by the Spanish government in dealing with them, many of the results which the American government has now attained would have been achieved years ago.*

THE IGOROTS OF BENGUET, LEPANTO, AND AMBURAYAN (SEE PICTURES, PAGES 1169, 1174, 1221, 1238, 1241, AND 1255).

The Igorots who today inhabit the subprovinces of Benguet, Lepanto, and Amburayan must be considered as constituting a single tribe, although they speak several distinct dialects, of which Nabaloi and Kankanai are the more important. The territory which they occupy is for the most part very mountainous. They number today in Benguet 28,000; in Lepanto, 27,000, and in Amburayan, 34,000.

They are a robust and vigorous people. Both men and women are as a rule short, heavily built, and strongly muscled,

*I have translated and illustrated his account of this interesting tribe, and have published it in the *Philippine Journal of Science* for July, 1909.

1500

THE SUNDAY DOG-MARKET AT BAGUIO

"Dogs are a highly appreciated article of diet, and are now brought in large numbers to Baguio from the lowlands for sale. On Sunday mornings the Baguio dog-market presents a unique spectacle" (see text, page 1201)

XUM

with broad, spreading feet. Their hair is perfectly straight. Many of them have large and beautiful eyes. As a rule the men wear their hair short, although some individuals, especially in Lepanto, allow it to grow to a considerable length.

The usual dress of the men is the clout, supplemented, when the means of the individual permit, with a cotton blanket. They are, however, glad to wear flannel shirts and coats of khaki or blue army cloth when obtainable. They also take kindly to hats. Indeed, many of them have hats of their own make.

In view of the scanty costume of the men, it is a surprising fact that the women are ordinarily careful to keep their bodies fully covered, although when working about the house, weeding rice fields, or washing clothes they frequently omit upper garments. Wealthy women often wear several superimposed skirts and nearly all bind towels about their heads (see page 1169).

WHERE SILENCE IS REALLY GOLDEN

Neither sex has any very elaborate ornaments. Some of the men adorn themselves with large bands of beads or wire and with ear ornaments of brass or silver. They often tattoo the backs of their hands. Some women have very elaborately tattooed arms, but on the whole tattooing is practiced much less extensively than among the Ifugaos, the Bontoc Igorots, or the Kalingas. The women wear similar ear ornaments and strings of beads as well. A few wealthy individuals have ear ornaments of solid gold.

In Benguet a number of wealthy women possess beaten plates of thin gold, which they wear between their lips and front teeth on special occasions, thus completely closing their mouths. Doubtless many American men would rejoice if ornaments of this character were to become fashionable in the United States. When they are worn the male sex monopolizes the conversation!

These Igorots are supposedly monogamous, although the men sometimes keep concubines, especially in Lepanto. Parents are very fond of their children and bring them up with care. The case of a boy prone to be untruthful is passed upon by a committee of old men, and if the verdict goes against him he is staked out on the ground and flogged in a fashion which he is not likely soon to forget.

DOGS AS A TABLE DELICACY

The people of this tribe are now peaceful, industrious agriculturists, and have never been head-hunters. They live chiefly on *camotes*, but raise some *gabi* and considerable quantities of rice, much of which is grown on terraces which would seem wonderful were they not dwarfed by the more marvelous ones of the Ifugaos and the Bontoc Igorots. Irish potatoes and coffee, introduced years ago by the Spaniards, are raised for sale. Pigs and chickens are kept in considerable numbers, but are as a rule eaten only on ceremonial occasions. Dogs are a highly appreciated article of diet and are now brought in large numbers to Baguio from the lowlands for sale. On Sunday mornings the Baguio dog-market presents a unique spectacle (see page 1200).

The Benguet Igorots raise good horses in considerable numbers, and both men and women ride with skill, differing absolutely in this respect from the Ifugaos, Bontoc Igorots, and Kalingas, who neither keep horses nor know how to use them.

Several different types of houses are in common use. Of these the meanest is built of grass and sits flat on the ground. Such a house usually has a raised platform of hewn boards on which its occupants sleep. A more pretentious but even less sanitary dwelling is that of certain Lepanto Igorots, which is placed on the ground, but has low board sides and a high, peaked roof which contains a storeroom. It is without windows. The occupants have individual sleeping-boards, which they lay on the damp ground (see page 1174).

In the vicinity of Kabayan the Benguet Igorots build good houses, which have floors and sides of boards and are even possessed of windows, while near Baguio and Cervantes a number of individuals have constructed up-to-date dwellings with galvanized iron roofs, furnished with chairs, tables, beds, and American

stoves. Marked improvement in house architecture is one of the results of contact with Americans.

The houses are usually grouped in small villages, but sometimes stand singly in very isolated places.

THE ONLY NATIVE PHILIPPINE MINERS

The Benguet and Lepanto Igorots have mined gold for centuries and are the only native miners in the Philippines. Ancient gold ornaments of unknown origin are still to be found among them.

At the time the Spaniards entered their territory they were armed with lances, shields, bows and arrows, and offered resistance to the invaders; but, so far as is known, they have never been head-hunters and today they are entirely peaceful.

Like the other tribes of northern Luzon, they are a music-loving people. They sing very pleasantly and sometimes use bamboo flutes to accompany vocal music. Their dance music is produced by *gansas* and long-barreled wooden drums with skin heads. The tone of such a drum is varied by fingering the head and by pressing the long barrel with the bare arm. The sounds produced by these instruments are supplemented by striking a bit of steel upon a stone. When a dance is in progress a man with the steel and stone and two *gansa* players march about with the dancers, while the drum players, usually two in number, squat close by.

A dance which is absolutely characteristic of this tribe is the so-called "bird dance," usually participated in by one man, wearing blankets over his extended arms in imitation of the wings of a bird, and one woman, who wears a blanket wrapped closely about her body. Another common dance is a circle dance, participated in by a line of men and a line of women, who devote much time to singing and bending their bodies about, but indulge in comparatively little footwork.

A number of schools have been established for these people. Girls are taught to weave good cloth (see page 1169). Young men have already been educated sufficiently to serve successfully as secretaries and treasurers of their towns.

The daily wage has risen steadily since the American occupation and opportunity to work can practically always be had by those who wish for it. The people of this tribe have prospered under American rule and today live in better houses, are better fed, wear better clothes, and enjoy better health than ever before.

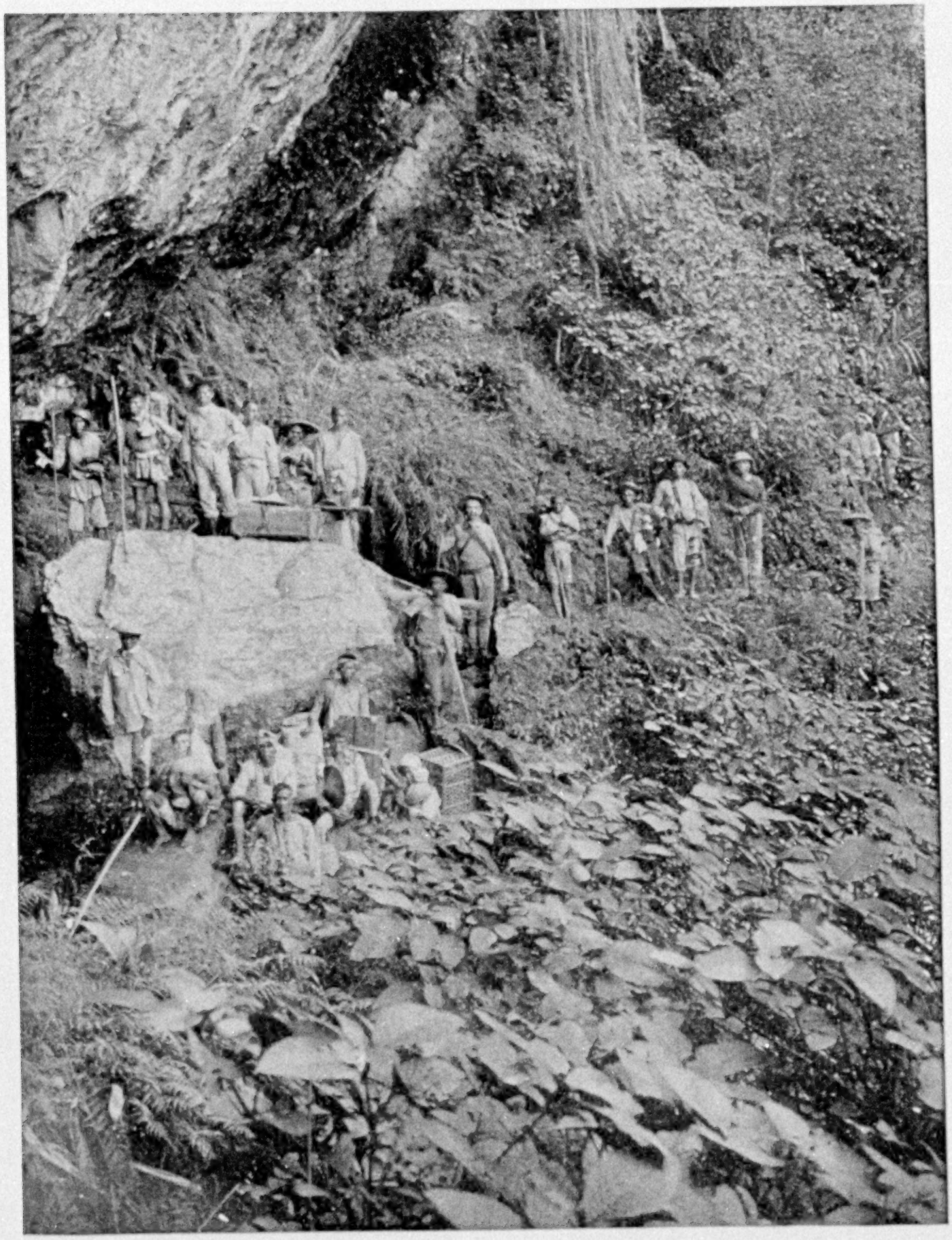
THE IGOROTS OF BONTOC (SEE PICTURES, PAGES 1167 AND 1222)

The Bontoc Igorots are a strong, warlike, head-hunting tribe numbering approximately 76,000. They are almost limited to the very mountainous region constituting the subprovince of Bontoc, but a very few are to be found in the subprovince of Kalinga. For the most part their territory is separated from that of neighboring tribes by mountain barriers.

They are straight-haired people, probably of Malayan origin. Both men and women are splendidly developed. I myself consider them physically superior to any other Philippine tribe except the Kalingas. While on the average they are more muscular than the latter people, they are at the same time more heavily, not to say clumsily, built. Both men and women are uncleanly, but there is a noticeable improvement in this regard.

The dress of the men is usually a clout, although this is sometimes replaced by a mere apron. Blankets are comparatively rare. The men have long hair banged across the forehead and rolled into a knot behind, where it is confined by a jaunty, more or less highly ornamented, rattan cap. They make huge holes in the lobes of their ears, into which they thrust wooden plugs, bamboo rings, and various other objects which they consider ornamental. Occasional individuals wear huge metal pendants in their ears.

Chains of brass wire are highly prized as waist ornaments, and the man who can attach a valve of a pearl oyster-shell to his girdle is considered fortunate indeed. The men tattoo their chests and backs very extensively. They often have numerous tattoo-marks on their arms and faces as well. These facial marks supposedly have to do with head-hunting exploits.



ON FOOT IN THE MOUNTAINS OF NORTHERN LUZON (SEE TEXT, PAGE 1240)

Before the present roads through the Mountain Province were constructed travel was extremely arduous. The so-called trails were mere foot-paths, and the fatigue involved in following them was so great that travelers endeavored to reach their destination by water whenever possible. Contrast the discomforts of travel over such a trail as this with the ease afforded by a road such as that shown on page 1212!

WHERE THE CLOTHING OF EVE IS FASHIONABLE

The typical woman's costume is a short skirt woven from thread made of bark. It is secured at the waist by a girdle of similar material, but is usually open at one side from the knee to the waist. When cloth is not available, Bontoc Igorot women often fashion really very attractive skirts from shredded banana leaves or the ornamental, magenta-colored foliage of a plant common in the Luzon Mountains. Upper garments were in the past almost never worn, but are now gradually coming into use as a result of contact with whites and Filipinos, who are teaching these light-hearted and innocent-minded daughters of nature to be ashamed of the beautiful bodies with which the Creator has endowed them. Both men and women wear blankets on occasion, if fortunate enough to possess them.

The women use ear ornaments similar to those of the men, and in addition wear in their hair and about their necks more or less elaborate strings of beads, boar tusks, dog teeth, and ornamental seeds.

When there is occasion to swim or ford streams or to work in the water in rice fields, both men and women strip without any apparent hesitation, although women who have occasion to work long in the fields usually, but by no means always, extemporize skirts of leaves (see page 1167).

The typical house of the Bontoc Igorot has a grass roof which overhangs, but does not meet, low board sides. There is a storeroom in the roof. The ground space is divided between a sleeping-box at the end opposite the entrance, a stall in which food is prepared, another stall in which it is cooked, and a larger space utilized as may be convenient.

The houses are grouped in large villages, which are often readily accessible. The people of this tribe depend on large numbers of fighting men for protection rather than on inaccessibility.

CLUB-HOUSES FOR THE UNMARRIED

The villages are divided into *atos*, or wards, in each of which there is, or should be, a group of three buildings, of which one serves as a common sleeping place for girls, unmarried women, and widows; a second answers a similar purpose for boys, unmarried men, and widowers, while the third is a sort of men's club, which contains a secret room, in which are kept the skulls of enemies killed in war, and has a second room opening off from a stone court. In this court unoccupied men loaf and talk, and here are held councils to settle important questions. The room opening from it affords a convenient refuge during inclement weather.

The Bontoc Igorots build immense systems of rice terraces with strong retaining walls. They are excelled only by the terraces of the Ifugaos. *Camotes*, however, form their principal food. They raise some beans, corn, and millet.

They not only keep hogs and chickens, but raise carabaos in some number, allowing them to run half wild and never using them for draft purposes, but eating them on ceremonial occasions.

They have manufactures of some importance, making head-axes, metal and clay pipes, earthen pots, salt, woven bark cloth, cotton blankets, well-woven clouts, and other small articles.

The Bontoc Igorots have been inveterate head-hunters, and were formerly constantly at war not only with neighboring tribes, but among themselves. Fortunately, head-hunting has now ceased almost completely throughout their territory.

They are very fond of music and dancing, in which they indulge on all possible occasions. The only instruments used are *gansas*, one of which is carried and played by each dancer throughout the performance.

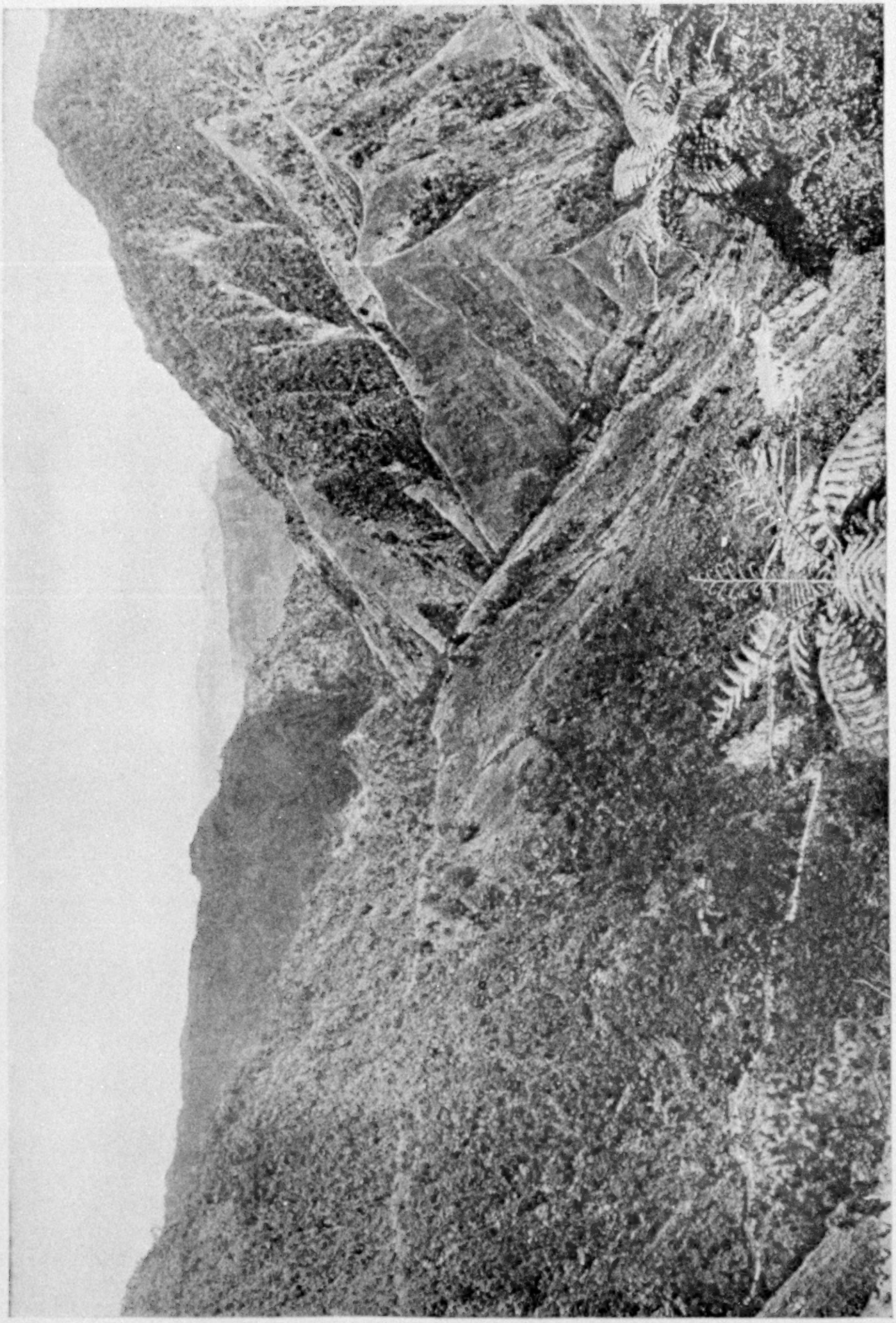
The Bontoc Igorots, like the Ifugaos and the Benguet Igorots, are spirit worshippers. Their religious practices consist chiefly in efforts to propitiate the *anitos*, or spirits of the dead, who are believed to have power for good and evil.

They are monogamous, but have a curious system of trial marriage, under which young people live together for a

ONE SEES WONDERFUL VEGETATION ALONG THE TRAILS OF THE MOUNTAIN PROVINCES

"It is now possible to make in perfect comfort a most wonderful horseback trip through the Mountain Province, on which one sees magnificent tropical vegetation and the oak and pine trees of the temperate zone . . . . mountain scenery of unsurpassed beauty, and a thousand and one things each of which makes its own strong appeal" (see text, page 1243).

XUM



A STRETCH OF GOVERNMENT TRAIL IN THE MOUNTAINS OF NORTHERN LUZON

time, apparently for the dual purpose of ascertaining whether married life will be congenial and whether it will be fruitful. The latter point once satisfactorily settled, they promptly marry and usually continue to live together to a ripe old age. Divorce is, however, permitted under certain circumstances.*

THE IGOROTS OF LUBUAGAN (SEE PICTURES, PAGES 1175 AND 1181)

Lubuagan is the capital of the subprovince of Kalinga. Its inhabitants and those of the neighboring villages are commonly, and perhaps properly, referred to as Kalingas, but they differ in certain essential particulars from typical representatives of this tribe. Here the regions inhabited by pure Kalingas, Bontoc Igorots, Ifugaos, and Tingians meet. It may be that the people under discussion have resulted from intermarriage between members of these several tribes. It may be that they were originally tribally distinct, but have come to resemble both the Bontoc Igorots and the Kalingas as a result of intermarriage with them. At all events, many of the men of this No Man's Land are superbly developed and many of the women are graceful and attractive.

The men wear more elaborate feather ornaments than do the Kalingas. On the backs of their heads they have the typical Bontoc Igorot rattan hats, which are, however, apt to be incrusted with agate beads. The bodies of the women, usually bare from the waist up, are often slender, graceful, and in marked contrast to those of their chunky Bontoc sisters.

About the waist and hips they wear bulky woven rattan "bustles," or "form improvers," and their skirts are stretched over these and tucked in at the waist between them and their bodies (see page 1181). The skirts are gaily embroidered and are often liberally ornamented with pendants of mother-of-pearl. Many of the women of this region paint their faces bright orange red on festal occasions—a custom unknown elsewhere in the islands (see page 1181).

Their houses resemble those of the Kalingas more than those of the Bontoc Igorots and are often grouped in compactly built towns of considerable size (see page 1175).

In warfare the Lubuagan Igorots use typical Kalinga weapons, but their music and dancing resemble those of the Bontoc Igorots in that the men carry the *gansas* and play them as they dance. The dancing of the women, however, is much more active and graceful than that of the Bontoc women.

THE ILONGOTS (SEE PICTURES, PAGES 1179, 1182, 1186, AND 1220)

The people of this tribe, also known as Ilongotes and Ibilaos, are forest dwellers and many of them are semi-nomadic. Their territory was formerly divided between the provinces of Isabela, Nueva Vizcaya, Pangasinan, Nueva Ecija, and Tayabas, but all of it has recently been added to the province of Nueva Vizcaya in order that they might be brought under centralized control. In 1820 they extended as far south as the Laguna de Bay, and some of these people could then occasionally be met with almost in the outskirts of the city of Manila; but their hand has been against every man and every man's hand has been against them, with the result that their number has decreased and their territory has diminished as they have been driven back before advancing civilization. It is thought that they do not now number more than 6,000.

They are a sharply marked tribe. Many of the men and women are of such low stature as to appear dwarfish. In the territory which formerly belonged to Isabela the Ilongots have intermarried freely with the Negritos and their physical characteristics have in consequence been profoundly modified. But even in the territory where this has not occurred many of the men are heavily bearded.

A clout, scarlet when possible and often ornamented with beads, constitutes

* A very full description of these people by Dr. Albert E. Jenks has been published by the Bureau of Science at Manila in the form of a beautifully illustrated book entitled "The Bontoc Igorot."

1208

A DELEGATION COME TO MEET THE AMERICAN COMMISSIONERS

When seen close at hand this trail looks level, but when viewed at a distance the grade is readily perceptible

the usual man's costume. The women wear short skirts reaching from the knee to the waist and, when obtainable, upper garments as well (see page 1186). Often both men and women are clad in bark cloth only, on account of the impossibility of obtaining anything better.

A PASSION FOR ORNAMENT

They take delight in ornamenting their garments with beads, bits of shell, and other bright objects, and display extraordinary patience and skill in doing this work and in fabricating elaborate chains from bits of wire and tasseled ornaments from white horse-hair (see page 1182). Garments and tobacco pouches are often embroidered with some little skill. Many of the men wear brass-mounted ear ornaments fashioned from strips of the scarlet beaks of hornbills. Their hair, which is apparently never cut, is usually confined above the forehead with a net and, wrapped with rags or bark, forms a projecting chignon at the back of the head. Back baskets and knife sheaths are elaborately ornamented with beads, tassels, and horse-hair plumes. Both sexes wear belts or girdles of cowries.

Their houses are somewhat primitive and one is sometimes occupied by several families. Access to them is obtained by climbing notched poles. Pieces of wood fashioned like long horns usually extend from the two ends of the short ridgepole. A number of houses may be found near each other, but, so far as my observation goes, never closely grouped.

The Ilongots cultivate forest clearings in a haphazard sort of way, growing upland rice, *camotes,* and a little sugar-cane, but they subsist largely on game and fish. They are skillful in the use of the bow and arrow, which they have probably learned from their neighbors, the Negritos. Their lances have small, weak heads and the shafts are usually ornamented with spiral bands, differing in this respect from the lances of all other Philippine tribes. War-knives, or *bolos,* are well made and formidable. They are carried in rather elaborately carved sheaths, the form of the sheath not corresponding at all to that of the knife. Their light, narrow wooden shields are primarily intended for stopping arrows.

HEAD-HUNTERS IN AN AIMLESS SORT OF WAY

The Ilongots are head-hunters in an aimless sort of a way. They invariably attack from ambushes, which are often most skillfully prepared. Until quite recently, they have annually killed a considerable number of Filipinos, and although they have now given up this highly objectionable custom, in the more remote settlements they still fight among themselves.

They are a timid, very suspicious, and highly emotional people. When friends who have been separated for some time meet they often weep copious tears for no apparent reason except that they are glad to see each other.

The Ilongots are a filthy people, and as a result suffer dreadfully from skin diseases.

Their dancing, which, so far as my observation goes, is indulged in by men alone, is a most extraordinary performance which must be seen to be appreciated.

Two schools have been established for them and, contrary to my expectation, their children have proved bright and teachable, readily learning to speak English quite fluently and promptly profiting by opportunity to do industrial work. The extraordinary patience and manual dexterity which these barbarians display in fashioning their ornaments should some day become a valuable commercial asset for them.

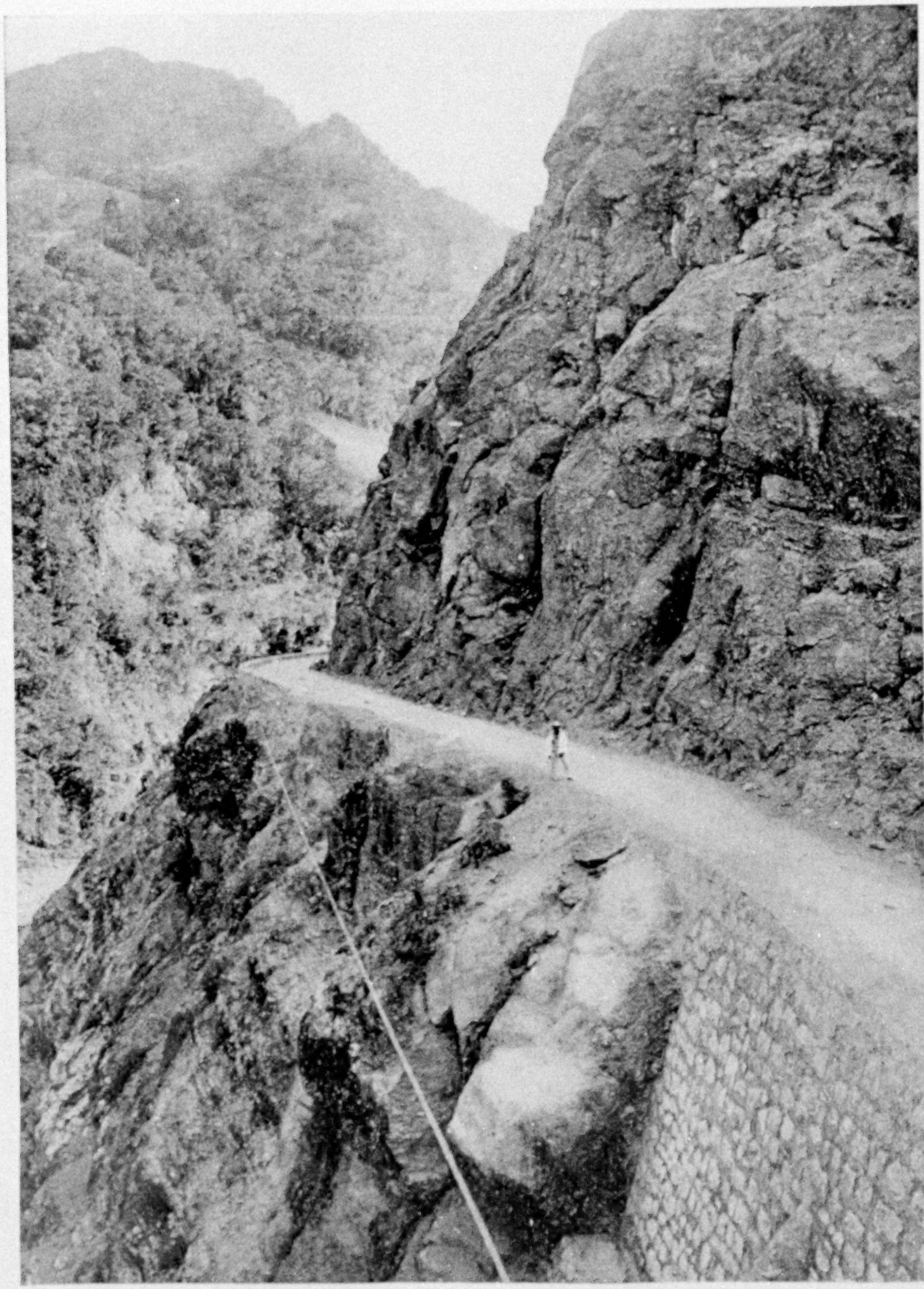
Friendly relations have now been established with the people of practically all their settlements, but it will require a much longer time to civilize them than will be needed with most of the wild tribes, and there is no present reason to believe that individuals having much Negrito blood will ever be civilized.

In many particulars there are extraordinary similarities between the Ilongots of northern Luzon and the Mandayas of Mindanao. The relationship between these two peoples, now so widely separated, ought to be carefully worked out.

XUM

AN OLD TRAIL WITH ITS FOOT-BRIDGE

"The so-called trails were in most cases mere foot-tracks made by the wild men, over which the tough and sure-footed Philippine ponies could not even be led" (see text, page 1240)



ON THE NEW BENGUET ROAD

This picture shows a remarkable contrast between old and new when compared with one of the old trails shown on page 1210. For 21 miles this road runs through scenery which for beauty cannot be excelled anywhere in the world.

A MOUNTAIN PROVINCE TRAIL

"On account of limited funds the trails are built narrow at the outset, but are rapidly widened, in connection with maintenance work, until they become passable first for narrow tread carts and then for carts of ordinary size" (see text, page 1243)

THE KALINGAS (SEE PICTURES, PAGES 1183, 1192, 1225, AND 1226)

The Kalingas are a strong, head-hunting tribe, numbering some 76,000, inhabiting a subprovince bearing their tribal name situated in the central part of northern Luzon. Their territory is, on the average, somewhat less mountainous than that of the Ifugaos and Bontoc Igorots.

Both men and women are comparatively tall and in many instances are extremely well formed (see page 1183); the perfect muscular development and graceful figures of the men are especially noteworthy. In my opinion, the typical Kalinga warrior is the finest-looking wild man to be found in the Philippine Islands (see page 1192). As a rule the members of this tribe have straight hair, but an occasional rare individual, bearing no other resemblance to the Negritos, displays a shock of fuzzy wool which is hard to account for.

THE PEACOCKS OF THE PHILIPPINES

The Kalingas are the most gaily dressed people of northern Luzon. The men wear regulation clouts, but they are not seldom ornamented with beads, buttons, etc. Their short jackets of gaudily colored cloth are also often adorned with beads and tassels. Gay turbans are commonly worn, and the hair, banged across the forehead and left long behind, is frequently stuck full of scarlet Hibiscus, marigolds, or other gay flowers and of really gorgeous feather ornaments.

Handsome blankets worn over one shoulder and under the opposite arm and ornamental bags for carrying small personal belongings complete the usual costume of the male, except for the ear plugs, which are fashioned with especial care and are often inserted in such a way as to project backward against the sides of the neck and turn the lobes of the ears directly forward. Their front ends are covered with embroidered cloth or adorned with highly polished coins, bits of looking-glass, or other bright objects. In some instances the ear plugs are made of rolls of bright-colored worsted (see page 1192).

FALSE HAIR HEREDITARY IN THIS TRIBE

The women wear gaily colored upper garments and skirts. The wealthier ones have enormous necklaces of agate beads, while heavy and peculiarly shaped ear ornaments of brass and of mother-of-pearl are almost invariably in evidence. Their heads are adorned not only with abundant natural locks, but with switches made from the tresses of departed female ancestors, and into the masses of hair thus built up are thrust gay scarlet and yellow feather plumes.

The Kalingas are a cleanly people and their beautifully formed bodies are usually free from disfiguring skin diseases. They live in small villages.

The wealthier Kalinga men are usually openly or secretly polygamous, but their first or lawful wives are apt to lead subsequently acquired favorites a dance.

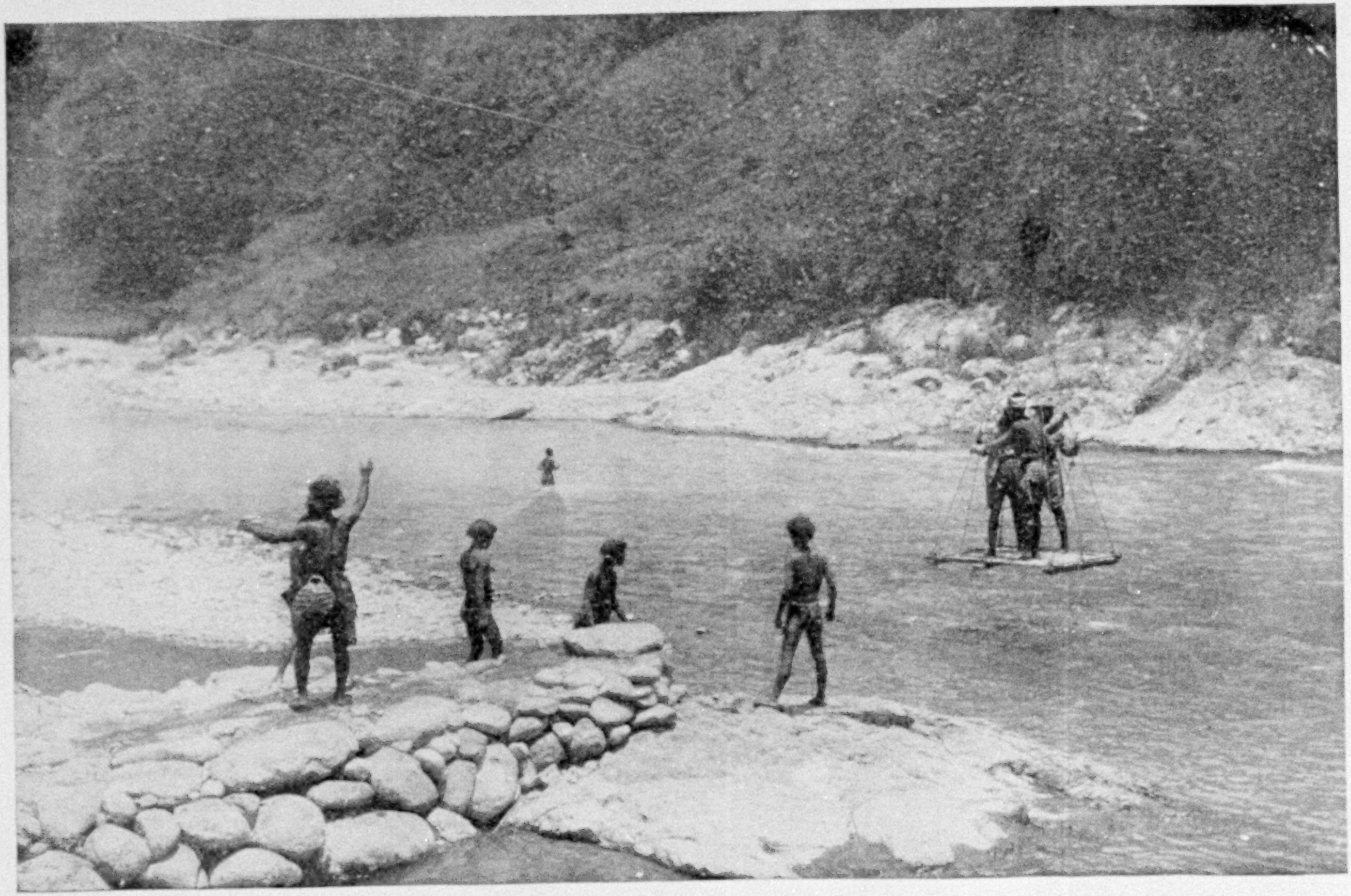
Many of the Kalinga houses are extraordinarily well built on conventional lines which show little variation. There is a place for everything and everything is kept in its place. Furthermore, the houses are clean. A feature especially appreciated by those who have to sleep on their floors is that the flooring, which is made of rattan or of stems of *runo* grass, can be, and is, rolled up daily in the early morning, taken down to the nearest stream and thoroughly washed.

When inter-tribal warfare was general among the Kalingas, tree houses were common, but they have become comparatively unpopular, now that it is safe to build on the ground.

The Kalingas raise rice, *camotes*, and sugar-cane in considerable quantities, using the latter for the manufacture of a fermented drink called *basi*. Many of them are skillful hunters, adding to the family food supply by killing wild carabaos, deer, and hogs.

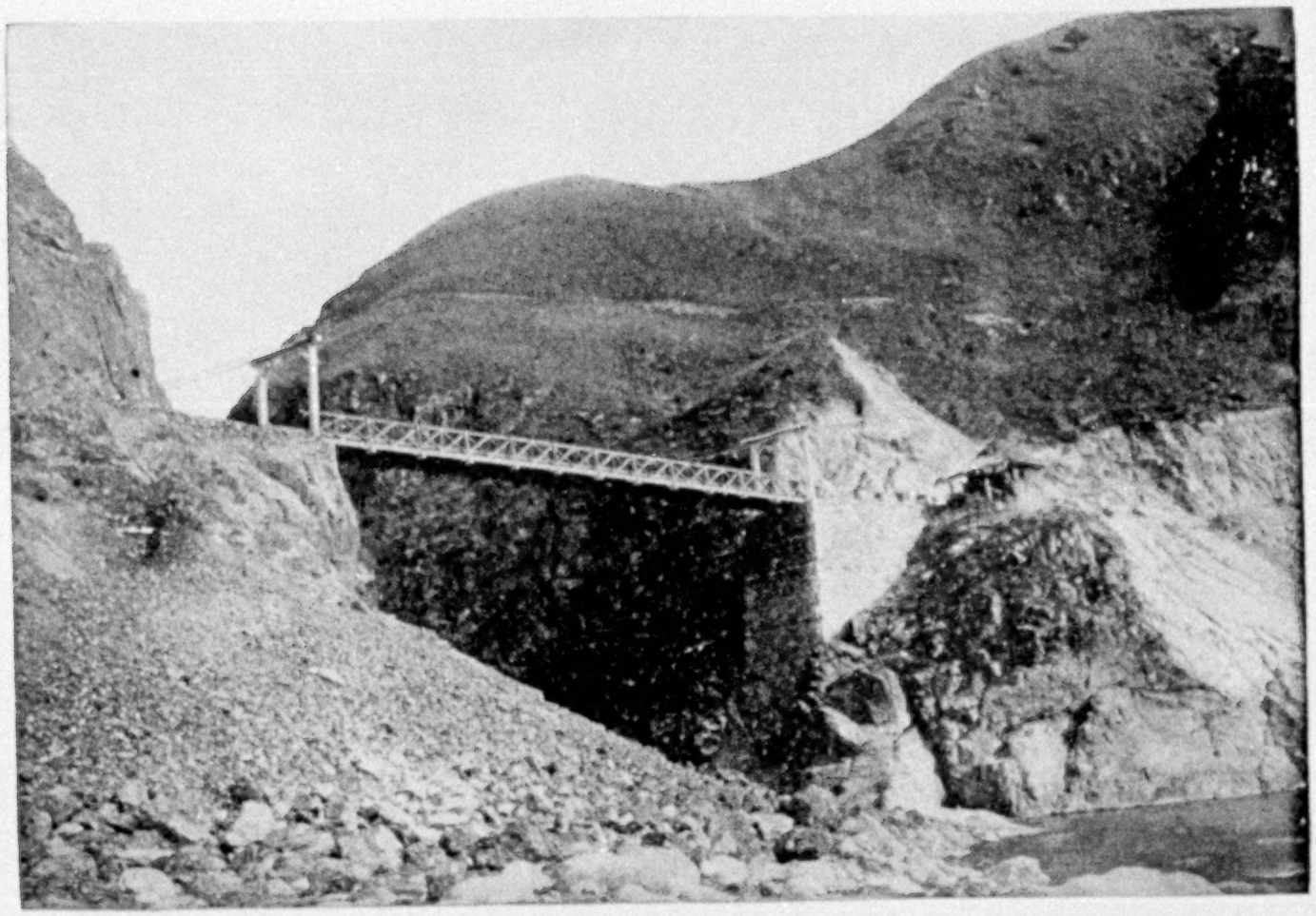
THEIR PREFERENCE IN WEAPONS

In war the men protect themselves with very artistically shaped wooden shields. Their offensive weapons are slender but deadly light head-axes and savage lances. Like most other northern Luzon tribes, save the Ilongots and Negritos, they do not use bows and arrows (see page 1225).



A FLYING FERRY IN OPERATION

When streams in the Mountain Province are so wide and swift that fording is impossible, flying ferries are installed, pending the construction of bridges. The stream here shown can be forded at low water, but is impassable during storms



A MOUNTAIN PROVINCE BRIDGE BUILT UNDER AMERICAN RULE

Bridges have to be placed at a great height above ordinary water level, as the streams of the Mountain Province are subject to terrific floods. During 1911 there was a rainfall of 38.8 inches in 24 hours. Later there was a rainfall of 31.4 inches in a like period. During the latter storm the wind reached a velocity of 108 miles per hour.

Their music is supplied by *gansas*, which are played in a fashion peculiarly their own. Their dances, in which one man and one woman usually participate, are energetic but ungraceful, and are usually individual performances of very brief duration.

Their religion, like that of their neighbors to the south, is a form of spirit worship.

No schools have as yet been established for their children, but there is reason to believe that the latter will prove apt pupils.

The Kalingas have until very recently been inveterate head-hunters. Crimes of violence are now comparatively rare among them and are for the most part confined to remote and inaccessible portions of their territory. While they bitterly hate their Filipino neighbors in Cagayan and are at times with difficulty restrained from continuing to take vengeance for past injuries, they are more than kindly disposed toward Americans, who can now travel safely through any part of their territory—a condition particularly appreciated by me; for I certainly diced with death when I first crossed it, with one American and one Filipino companion, in 1906.

THE KATABAGANES

The Katabaganes are a wild tribe of Malay origin inhabiting the mountains in Tayabas near the Ambos Camarines boundary.

But a few individual representatives of this tribe now remain, and practically nothing is known concerning them except the mere fact that they exist in the region mentioned. No photographs of them have ever been obtained.

THE MANDAYAS (SEE PICTURES, PAGES 1170 AND 1171)

The Mandayas, said to number some 30,000, inhabit the upper waters of the

9121

A CONFERENCE WITH IFUGAO HEAD MEN

At this conference the Ifugaos voluntarily imposed upon themselves a public improvement tax of one dollar per man per year. Men not able to pay the tax work ten days each. From left to right the Americans are: William F. Pack, governor of the Mountain Province; Dean C. Worcester, Secretary of the Interior, and Jeff D. Gallman, lieutenant governor of the subprovince of Ifugao.

XUM

Agusan River in Mindanao; also the valley of the river Salug and the territory between the headwaters of the Agusan and the town of Mati, on the Mindanao east coast.

Among them are to be seen many fine-looking individuals, with almond-shaped eyes and long, straight lashes, which give them a peculiar appearance. Their skins are light in color and are described by the Jesuits as "ashy gray." Both men and women commonly go fully clothed, the men wearing embroidered cloth trousers, with tasseled fringes at the bottoms of the legs, and handsomely embroidered shirts, while the women are clothed in elaborately embroidered long-sleeved upper garments and peculiar skirts woven of hemp in color patterns which are said to be produced by the manner of dyeing the individual fibers rather than the method of weaving them. A weaver who knows how to produce more than one of the several patterns is a great artist.

The women often have their arms loaded down with ornaments of brass and shell. Their hair is banged squarely across the forehead and worn in a knot on the back of the head, and into this is usually thrust a silver-mounted wooden comb. Bead necklaces are commonly worn. At the waist there hangs a huge mass of ornaments and charms (see page 1171).

Both men and women have long hair, and frequently wear long "beau-catchers" hanging down in front of their ears. Their hats, with feather ornaments very similar to those worn by the Ilongots, are ingeniously fashioned from bark and have two lateral strings so placed that when they are pulled apart the bark is bent. They are then placed against the sides of the head, and as the bark springs back into position the strings are tightened and the hat is thus firmly fastened on (see page 1170).

The Mandayas use bows and arrows with much skill. Their long, slender shields, which are sometimes ornamented with beads, remind one of the shields of the Ilongots, as do their strong, curved fighting knives, the sheaths of which are in size and form out of all proportion to the blades they contain.

SKILLFUL METAL-WORKERS AND JEWELERS

Some of the men are very skillful in working metals. They ornament the sheaths of knives with tastefully decorated silver bands and even inlay steel blades with silver. They hammer out great circular plates of silver called *patinas* and ornament them with engraved marks arranged in geometric patterns. They also work and temper steel with much skill.

Some of the Mandaya houses are fairly well built wooden structures, roofed with shingles made out of flattened bamboo. Others are much more primitive and are built in trees.

The Mandayas have in the past been inveterate fighters and slave takers. As yet they have been only partially brought under government control, and neither inter-tribal warfare nor slave-taking have been entirely checked. I once met a man who was carrying, but not wearing, the scarlet coat of a *Bagani*, or man who has killed six persons. I asked him if he was a Christian and he said he was. I asked him if he was a *Bagani* and he said *not yet;* he had killed only five people!

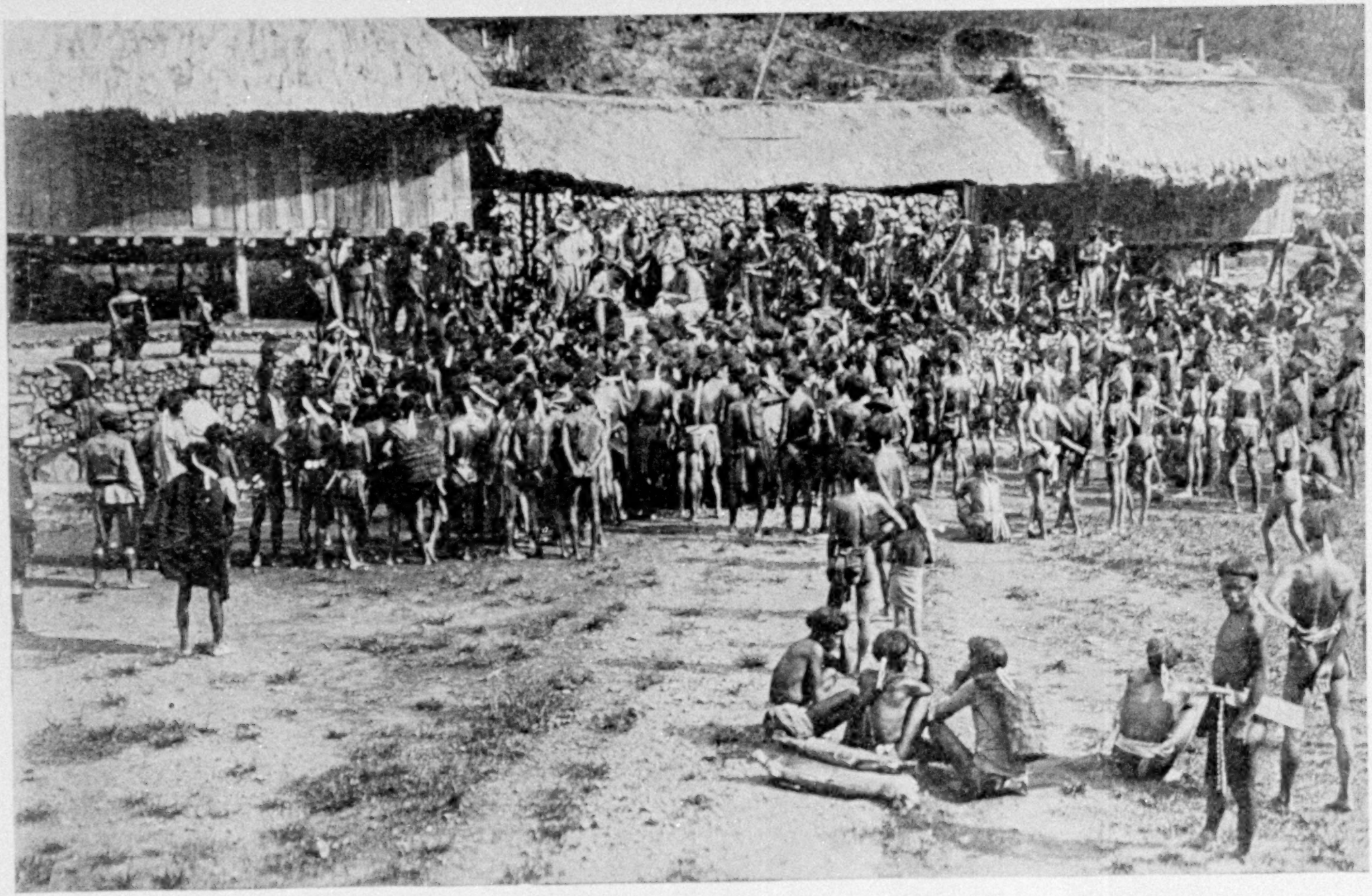
The Jesuit Father Pastelo has estimated the number of this tribe at approximately 30,000. The Manobos and the Moros are the only two Mindanao tribes which outnumber them.

THE MANGUAGUANS

The so-called Manguaguans inhabit the territory between that occupied by the Manobos and that occupied by the Mandayas. Although they are recognized by the Jesuits and others as a distinct tribe, I myself, after observing them for some time, am of the opinion that they are not entitled to such recognition. I consider them to be just the sort of people of mixed descent that one might expect to find in a region between the habitats of two tribes like the Manobos and Mandayas. These two tribes really imperceptibly grade into each other through the so-called Manguaguans.

THE MANGYANS (SEE PICTURE, P. 1178)

The Mangyans inhabit the interior of the great island of Mindoro. They are



DISTRIBUTING PRESENTS

Secretary Worcester is giving "congcong," or strips of white paper, to Ifugaos at Mayoyao. Ifugaos are very fond of these paper strips, which they put in their hair (see text, page 1243)

variously estimated to number from 5,000 to 20,000. This tribal designation has also been applied with doubtful propriety to the wild inhabitants of the little island of Sibuyan, who have now almost entirely disappeared. It may be that when we know more of the Mindoro Mangyans we shall find it necessary to divide them into several different tribes. I myself have lived among those inhabiting northern and central Mindoro, and have repeatedly visited those living in the southern and western portions of the island.

The northern Mangyans, especially those living on the slopes of Mount Halcon, are a very primitive people. The costume of the men consists of a clout only. The women also wear clouts, supported by braided rattan cord coiled around waist and hips. Little girls begin with only enough cord to go around the body two or three times, while old women often wear great masses of it. Girls of marriageable age and young unmarried women usually cover the breasts with a band made from the dried petiole of a banana leaf stitched with rattan. Clouts are usually made of bark cloth (see page 1178).

In the northern part of the island men and women have few, if any, ornaments and usually lack blankets. They are seminomadic, and when wandering through the forests in search of *cabo negro* palm trees, from which they obtain a starchy product similar to sago, they build individual shelters of the flimsiest character. I have seen them asleep in the rain, crouching on their haunches over small fires and each sheltered only by two or three rattan leaves, shaped much like huge ferns, stuck into the ground in such a way as to bend over.

Some of the members of the tribe spend the dry season wandering about in search of fish and game, which they take very skillfully with bow and arrows, and helping out their bill of fare with such vegetable products as they can obtain from the forest. When the rainy season begins they build more substantial structures, consisting of good-sized platforms of poles roofed over with palm or rattan leaves.

Some Mangyans make forest clearings and cultivate the soil to a limited extent, raising *camotes* and a little rice and sugar-cane.

HOW A PROFESSOR OF MATHEMATICS COUNTS

The Mangyans are sometimes polygamous. They are of low intelligence and are ordinarily unable to count above three. Professors of mathematics can, however, count up to twenty by utilizing fingers and toes. The common method of procedure in dealing with numerals above three is to tie the requisite number of knots in a bit of rattan. I have traveled for days with no other helpers or companions than Mangyans, with whom I was compelled to communicate by signs, yet we got on beautifully. They are kindly, gentle people who will never make trouble if decently treated, but when abused they are capable of revenging themselves, using for the purpose exceedingly deadly poisoned arrows.

They are by no means fastidious as to their animal food. I have seen them gorge themselves with the rotten flesh of the *tamarao*, or small Mindoro buffalo, although it smelled to heaven and crawled with maggots. If a white man had swallowed a bite of it he would probably have died of ptomaine poisoning, but they ate it with satisfaction and with apparent impunity. Snakes, crocodiles, and huge white grubs all form table delicacies highly appreciated by them.

The Mangyans in southern Mindoro are a much less naked people than are their northern brothers. The men frequently possess good shirts and wear neat cloth clouts ornamented with beads. They also wear bead necklaces and braided rattan armlets. Into the latter are thrust feather or flower ornaments. They are long-haired and frequently use head bands or small turbans. The women also wear beads in abundance, don cloth skirts over their clouts, and frequently have upper garments as well. These people raise, spin, and weave cotton.

AN ANCIENT PHILIPPINE ALPHABET

The Mangyans of southern Mindoro differ from all other Philippine tribes save the Tagbanuas, in that they have re-

tained and still use their ancient syllabic alphabet, scratching the characters on freshly cut joints of bamboo or bits of banana leaf.

They build comparatively good houses, and are more active and systematic in cultivating the soil than are their northern brothers. Several schools have been started for their children, who prove to be bright pupils.

In northern and northwestern Mindoro many individual Mangyans show marked evidences of Negrito blood. I believe that there have been Negritos in this island and that they have disappeared by fusing with their neighbors.

The interior of southern Mindoro has been found to be, relatively speaking, quite thickly populated. The inhabitants raise cotton and spin and weave their own cloth. They are so timid that it has thus far been impossible to establish communication with them.

Like the people of all other Philippine wild tribes, the Mangyans have their own peculiar music, using bamboo flutes and primitive stringed instruments to produce it. They sing a good deal. Certain individuals among them pretend to a sort of clairvoyancy and profess to be able to tell what persons at a great distance are doing.

The Mangyans communicate with each other in the forest by beating on the enormous buttressed roots of certain trees, apparently using a primitive sort of Morse alphabet.

All in all, they are a very interesting people, deserving of a more careful study than they have as yet received.*

THE MANOBOS (SEE PICTURES, PAGES 1172, 1173, 1176, 1234, AND 1235)

The Manobos are said to be the second most powerful tribe in Mindanao, although the Mandayas compete with them closely for this position. They are believed to number about 60,000. They inhabit the whole lower Agusan River valley and are found in smaller numbers to the north of Malalag on the Gulf of Davao, on Cape St. Augustine, and at various points in the interior of the district of Cotabato, even extending across the line into the subprovince of Bukidnon. They are a more than ordinarily tall and rather light-skinned people, with hair which is often wavy and sometimes curls quite closely; but as their territory abuts upon that of the Negritos in northern Mindanao, it is probable that intermarriage with the latter tribe accounts for the occasional occurrence of closely curling hair.

Their dress is very similar to that of the Mandayas (see page 1172). Indeed, most of the women wear Mandaya skirts, many of which are said to be made by Manobo women captured in war by the Mandayas, kept as slaves, and taught the complicated art of skirt-making. Rich people also wear the great engraved silver disks called *patinas*, which are manufactured by the Mandayas and are so highly prized by their women (see page 1176).

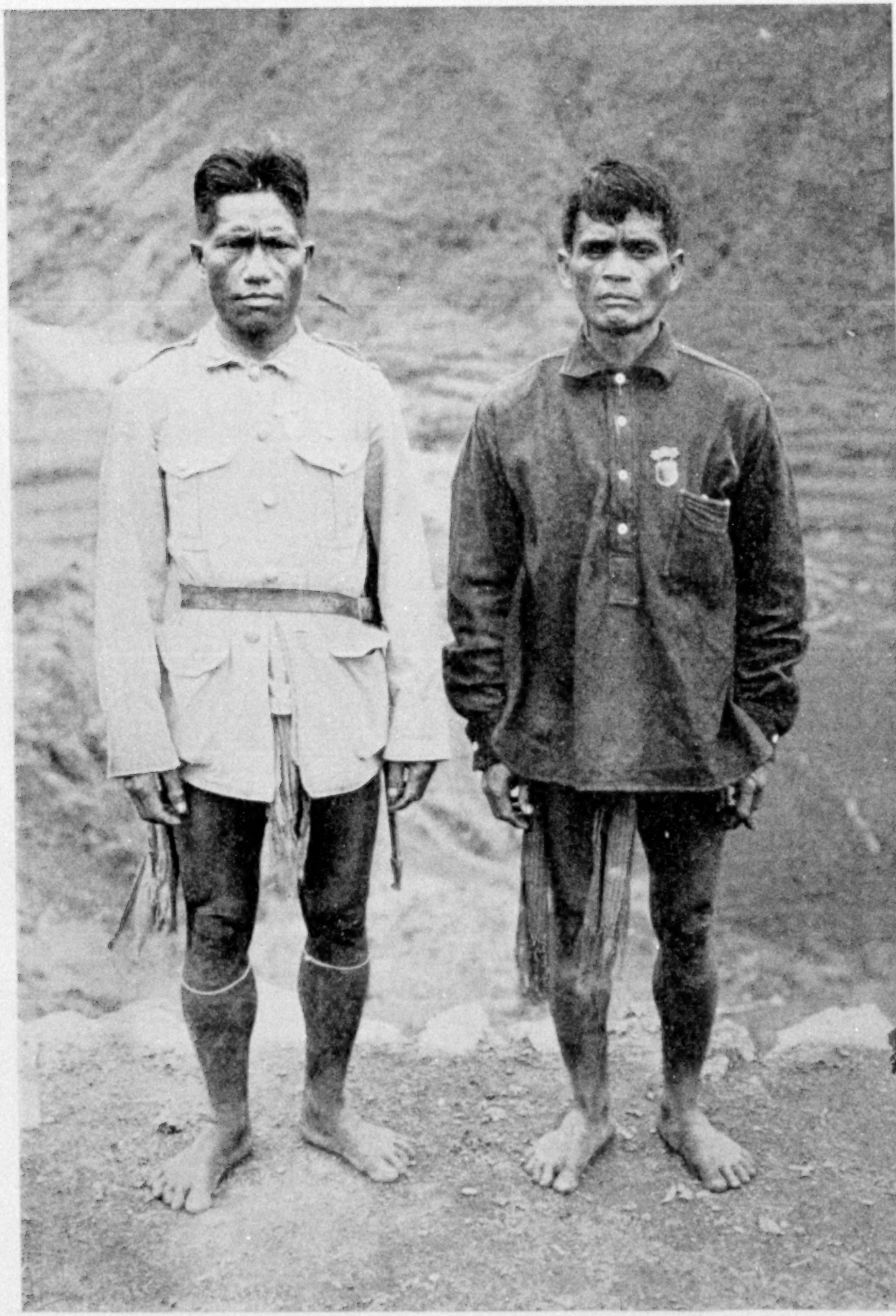
The Manobos, however, differ from the Mandayas in language and in customs to a marked degree. Furthermore, they seem to lack the skill in weaving and in metal working which the Mandayas possess.

Heretofore they have lived in single houses or small groups of houses scattered through the forest, but under American rule have been persuaded, in the Agusan River valley, to gather into villages along that stream and its tributaries.

Until compelled to give them up, they kept slaves and occasionally indulged in human sacrifices; in fact, it was by no means unheard of for a wealthy Manobo to tie up a slave, give his small boy a lance, and have the boy experimentally test different ways of killing and maiming by thrusting the lance into the quivering flesh of the unhappy victim.

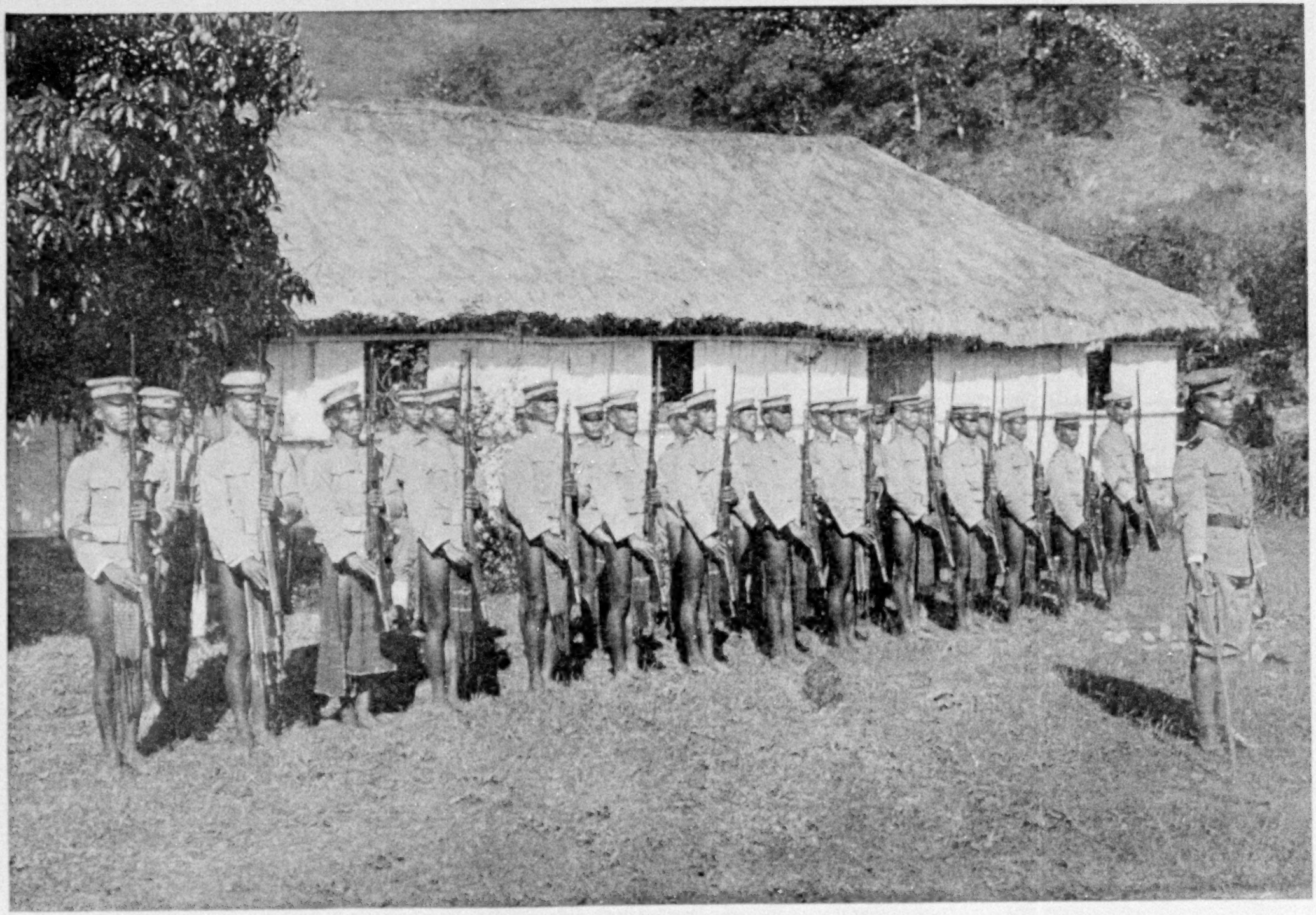
The Manobos practice agriculture in a more or less haphazard way, raising corn, rice, and yams, but often losing their crops as a result of floods. Their houses were wretched structures, but under American tutelage they have readily learned to construct much better ones (see pages 1234 and 1235). Many of them, however, still live in the tree-tops.

* Mr. Merton L. Miller spent some time among them and has published the results of his observations in the *Philippine Journal of Science* for June, 1912.



HONOR MEN OF THE BENGUET IGOROT POLICE (SEE PAGE 1245)

These men are wearing medals of honor given them for saving the life of Governor William F. Pack, who was swept away by a mountain stream in flood and would have drowned had they not plunged in after him.



BONTOC IGOROT CONSTABULARY SOLDIERS (SEE PAGE 1245)

A few years ago these men were head-hunting savages; today they form as smart and up-to-date a body of troops as can be found anywhere. They are extraordinarily well disciplined and efficient and are not hampered with trousers

In general, it may be said that those inhabiting the lower Agusan Valley, where they had long been mercilessly exploited by their Filipino neighbors, are debauched with bad liquor, broken-spirited, and hard to deal with, while the fighting Manobos further up the river, who in the past managed to maintain their independence, are now progressing much more rapidly.

WAR AND SUPERSTITION

Among the wilder Manobos the passion for *mangayaos*, or killing expeditions, is strong. The fighting men are, however, very superstitious, and if they hear a small pigeon, called *limocon*, call in the wrong direction, will immediately return home.

The Manobos who inhabit the back part of the subprovince of Bukidnon are physically an especially fine lot (see page 1173). The men in this region fight fiercely when unjustly treated, but have shown themselves very appreciative of fair and kindly usage, and, as a result of having received it at the hands of Americans, are rapidly forming villages and settling down.

The Manobos believe in an endless series of spirits or supernatural beings, called *busaos*, each of which is endowed with especial powers. Their priests, or *baylanes*, go through elaborate and remarkable ceremonies in establishing communication with the spirits and in communicating the desires of the latter to the people. At times these singular individuals seem veritably to become possessed of devils, and are dangerous if they can gain access to deadly weapons. I once had the good fortune to be present when the *busaos* were being called and witnessed some extraordinary sights.

The people of this tribe are especially fond of music and dancing, and their pantomimic dances far exceed, in number and variety, those of any other Philippine tribe with which I am familiar. In the course of an evening I have seen them mimic the woodpecker, the monkey, the robbing of a bees' nest, an old man with elephantiasis trying to dance, a young man stealing a kiss from a sleeping maiden, individual peculiarities of persons present, and what not.

THE MONTESES

The wild people, other than Negritos, who inhabit the mountainous interior regions in Panay and Negros, are commonly called *Monteses*. As the designation is a Spanish word meaning "mountain people," it is obviously unsatisfactory.

They are also called *Bukidnon*, and it may be that they are descended from the same parent stock as are the people of northern Mindanao, to whom this latter name is invariably applied, but if this is the case I have failed to note any evidence of it. It should be stated that "Monteses" is also an alternate name for the true Bukidnons.

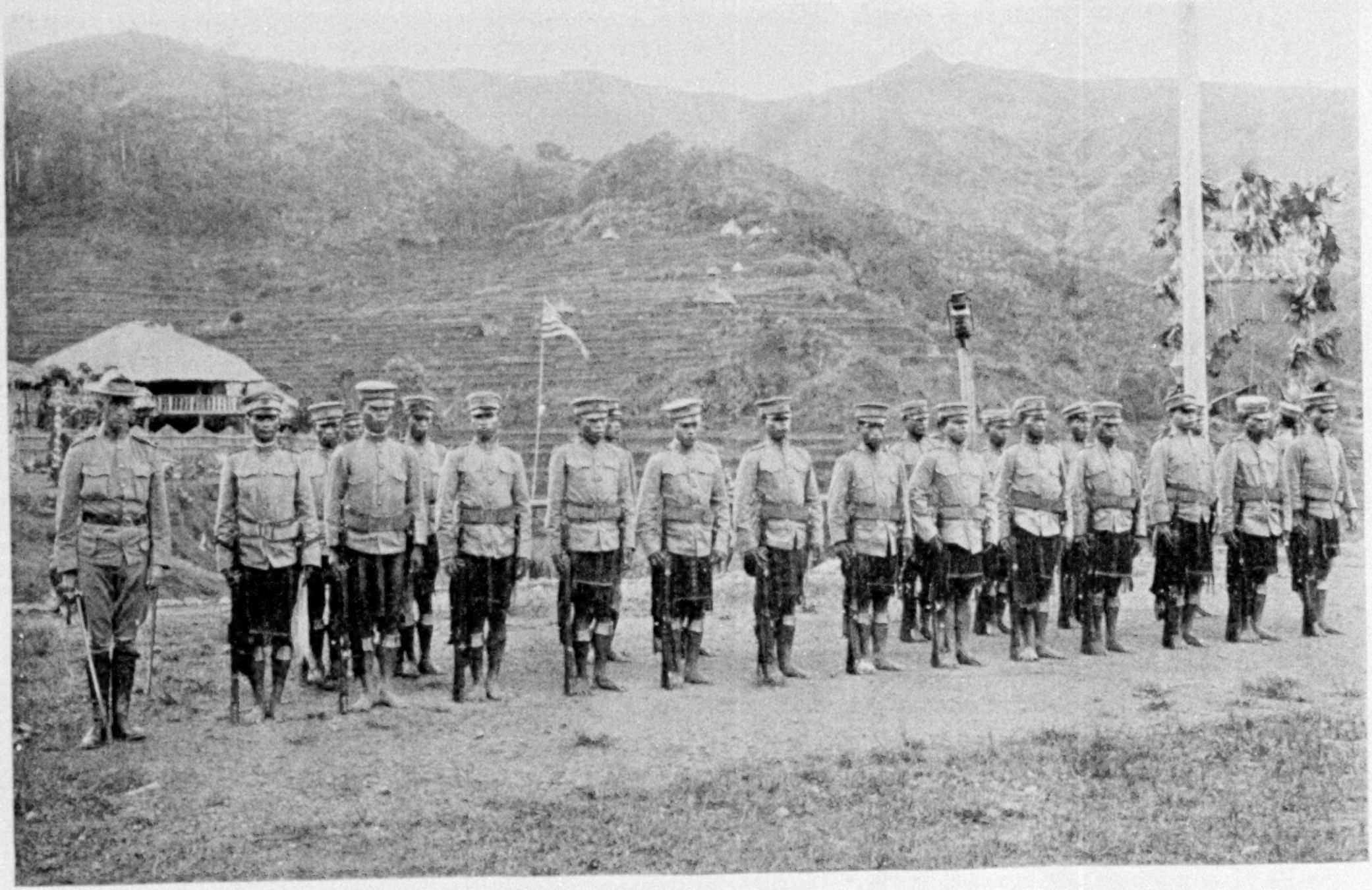
They are a people of Malay origin, whose original manners and customs have been much modified by contact with Filipinos and Negritos. The men wear clouts, the women skirts and camisas. They build fairly well-constructed houses of good size, but live a family or two in a place as a result of their belief that a person who dies needs some one to accompany him on his long journey, so that it is incumbent on his male relatives *to start a companion on the same road he is traveling*. As almost any one will do, a somewhat disturbed state of society results.

These people practice agriculture to a considerable extent.

They quarrel and fight among themselves, using exceptionally long *bolos* with peculiarly carved hilts and good, strong lances.

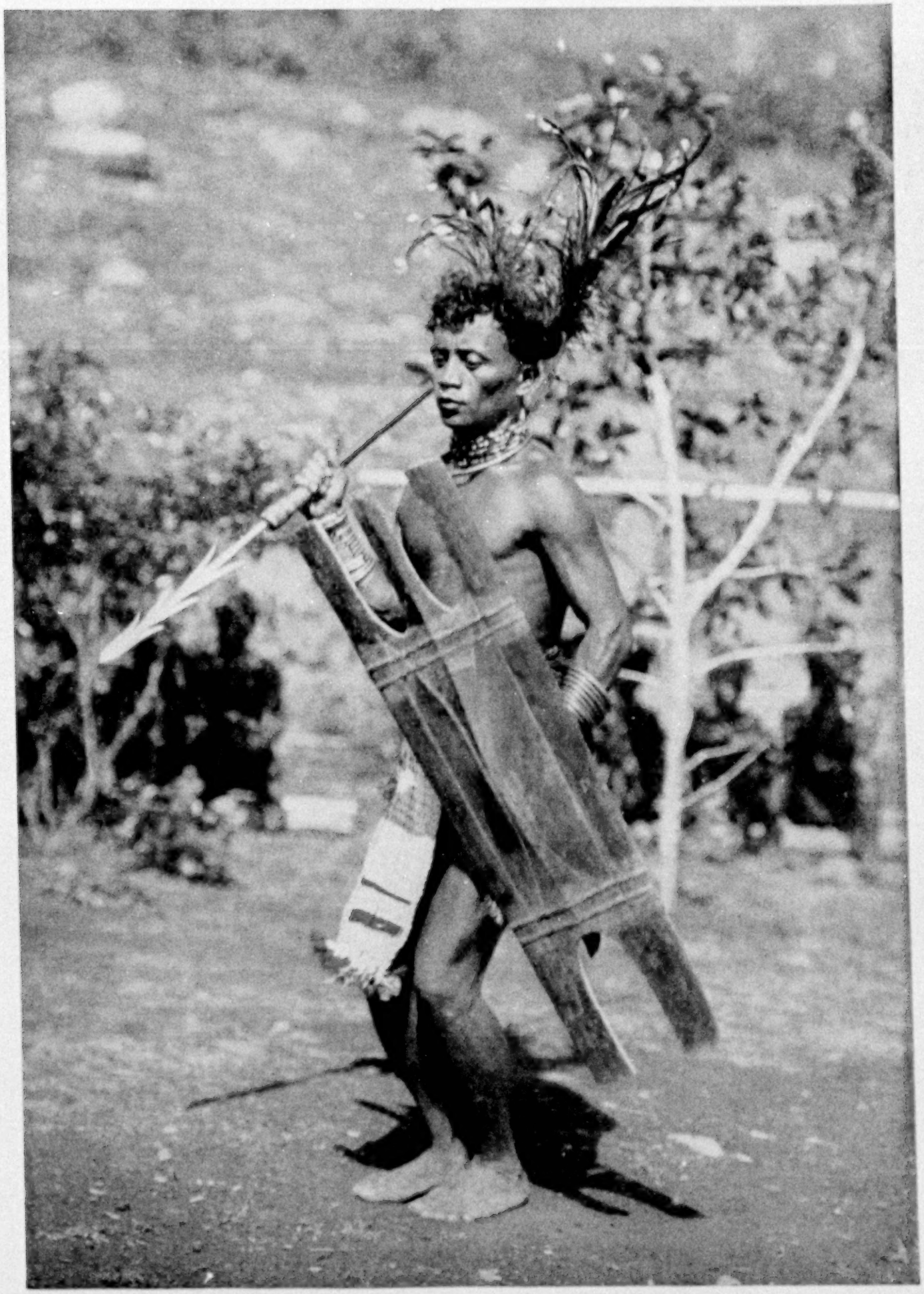
I lived among them in Negros for six weeks, but unfortunately the photographs then secured have since been destroyed.

At first they sought an opportunity to kill my companion and myself, believing that we had come to poison the stream from which they obtained their drinking water. Later, noting that we paid more for tiny birds' eggs than hens' eggs were worth, bought snail shells, and did other, to them, inexplicable things, they decided



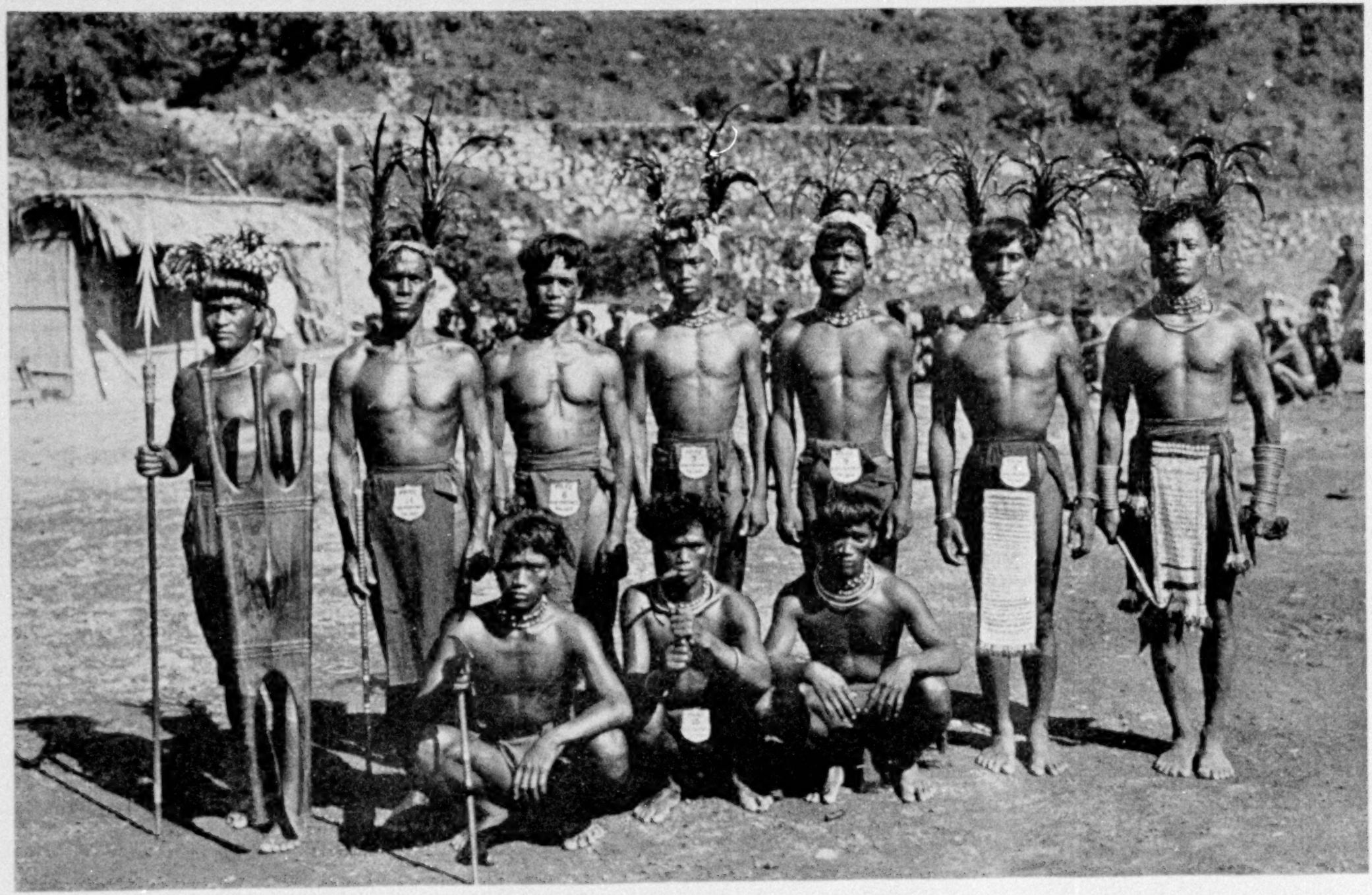
IFUGAO CONSTABULARY SOLDIERS (SEE PAGE 1245)

These men use the rifle with deadly accuracy and have shown themselves to be brave, efficient, and loyal. As a result of their activity the Ifugao territory is entirely quiet, and it is now more than six years since a head has been taken in the country of this once unruly head-hunting tribe



A KALINGA WARRIOR WITH HIS TRIPLE-BARBED LANCE AND CURIOUSLY SHAPED WOODEN SHIELD

"In my opinion, the typical Kalinga warrior is the finest-looking wild man found in the Philippine Islands. . . . In war the men protect themselves with very artistically shaped wooden shields. Their offensive weapons are slender but deadly light head-axes and savage lances. Like most other northern Luzon tribes, save the Ilongots and Negritos, they do not use bows and arrows" (see text, page 1213).



KALINGA POLICE

The wild men who join the police in the Philippines do not immediately develop into the smart, soldierly troops shown on pages 1222 and 1224. The Lubuagan police of Kalinga, for instance, wear their ordinary but scanty costume, merely attaching a police badge to their gee-strings

that we were crazy, and after that we got on famously with them.

THE MOROS (SEE PICTURES, PAGES 1177 AND 1189)

"Moro" is the Spanish word for Mohammedan, or Moor, and in the Philippines is used as a generic term applicable to all of the Mohammedan peoples who inhabit the coast region of the southern third of the island of Palawan, and also Balabac, Cagayan de Jolo, Tawi Tawi, Siassi, Lapac, Jolo, Basilan, and very numerous adjacent small islands, as well as much of the coast region in western and southern Mindanao and the lower part of the Cotabato River valley and the Lake Lanao region.

Moros of different regions differ considerably in language, dress, and customs, but have many things in common, the most important of which is the Mohammedan religion, which has fundamentally modified their natures and made them in many particulars essentially different from the other Malayan peoples of the Philippines.

Many of the men wear their hair short, but the Yacans in the interior of Basilan and the Moros of Lake Lanao wear it long. Turbans are in common use, although the Turkish fez makes an acceptable substitute, and *hadjis*, or men who have visited Mecca, wear tightly fitting white caps. As a rule, men dress in very tightly fitting jackets of cotton or silk, which are sometimes black or white, but are more frequently gaily colored. Their "dress-up" trousers are skin-tight below the knee, while those worn when they are at work or are expecting to fight are often as loose as pajama trousers (see pages 1177 and 1189).

Women wear similar loose trousers, with or without skirts, and cover the upper part of the body with tightly fitting jackets, often left open down the front to a point between or below the breasts. Like the men, they are passionately fond of the brightest colors.

PIRATES AND PEARL DIVERS

Except in the interior of Basilan and in the Lake Lanao region, the Moros are essentially a water people. Some of them live in their boats for long periods, while most build their houses on piles in the water whenever practicable, so that they can drop into their boats and be off on short notice. They are wonderful swimmers and divers. It is said that many of the best divers employed in the Ceylon pearl fisheries come from Jolo.

The Mohammedanism of the Moros is of a somewhat washed-out character, and many of the laws of their religion are more honored in the breach than in the observance, but such as it is they believe in propagating it with the sword, and fight with fanatical bravery.

Many of the men are skillful in working metals and fashion steel krisses, barongs, and campilans of deadly excellence. They also use lances, and in protecting themselves employ heavy, round wooden shields. From time to time certain individuals take solemn oaths to die killing Christians, and are then known as *juramentados*, or "sworn men." They secrete deadly weapons, betake themselves to places where there are crowds of people, and then run wild, cutting down every one within reach until they are themselves killed. They believe that as a reward for this commendable procedure they go straight to the seventh heaven.

Volumes might be written about the Moros; but I must content myself with saying that Dr. N. M. Saleeby is the greatest authority on them, and that some of the results of his important investigations have been published by the Philippine Bureau of Science.

The problem involved in tranquilizing and civilizing these people is a very grave one. It is my opinion not only that its solution is not yet in sight, but that we are at present not making as much progress as we might. At all events, we have performed a valuable service in releasing slaves who were formerly held in large numbers, and in effectively preventing the piratical and slave-hunting raids in which Moros promptly indulge when left to their own devices.

THE NEGRITOS (SEE PICTURE, PAGE 1180)

The Negritos, generally considered to be the aborigines of the Philippines, are

racially distinct from all the other peoples inhabiting the Archipelago which have not intermarried with them. It is probable that they originally occupied every island of any size in the group; but at present they occur only in northeast Mindanao, Samar, central Negros, central Panay, a few small islands north of Panay, north central Palawan, a few isolated points in southern Luzon, the mountains of Bataan, and Zambales, where they are relatively numerous; Abra, where there remain but a few individuals of mixed descent; Apayao, Cagayan, Isabela, and Tayabas.

The great forested and almost unexplored area extending from the northernmost point of Luzon to the vicinity of Casiguran and Baler is today the one remaining Negrito stronghold, and in many parts of this region it is still quite impossible to get into touch with them, for they flee at the approach of strangers.

They are of low stature; their skins are dark brown to black; their hair is woolly and closely curling; their bodies, arms, and legs are more or less thickly covered with "pepper-corn" hairs (see page 1180). Many of the men are abundantly bearded. It is a common custom with both men and women to shave the crown of the head, as they say "to let the heat out."

The Negritos are known in different parts of the Archipelago under different names, such as Abunlon, Aetas, Balugas, Buquiles, Dumagats, and Bataks, and after further study it may prove necessary to separate them into a number of tribes. This is, in my opinion, especially likely to result in the case of the woolly headed blacks of Palawan; but our present knowledge reveals such resemblances between the several groups of Negritos, and there are such radical differences between them and the Malay tribes that one is prone to regard them as *a people*. Not only are they characterized by low stature, dark skins, woolly hair, and flattened noses, but they all have the custom of sharpening their front teeth, and ornament their bodies with scar patterns instead of with the tattoo-marks so universally employed by the people of other tribes. There is a striking similarity between some of the Negrito scar patterns and those of the central African dwarfs.

INCAPABLE OF CIVILIZATION

The Negritos are bow and arrow people in the strictest sense of the word. They make and use an arrow poison of deadly effectiveness and are sufficiently skilled occasionally to bring down birds on the wing. Many groups of Negritos live exclusively by hunting and fishing and build the flimsiest of temporary shelters in lieu of houses. Others occasionally practice agriculture in a very primitive way and build rather more substantial "houses," but as often as not forsake their planted clearings before harvest time.

Negritos most certainly lead the simple life and their wants are few indeed. Their only domesticated animals are dogs and an occasional tame jungle fowl.

Unless able to purchase cotton cloth from Filipinos, they clothe themselves in the bark of trees. They make practically nothing but bows, arrows, fish-lines, fish-hooks, and a few baskets.

As to their numbers, one man's guess is about as good as another's. There may be 25,000 of them left.

Mentally, they are about on a par with the blacks of Australia or the bushmen of South Africa. Their birth rate is believed to be far below their death rate. Within a comparatively short time they have disappeared from Cebu, Masbate, Sibuyan, and probably also from Mindoro, where none can now be found. Only a few individuals remain in Tablas, Tayabas and Samar.

As I have elsewhere stated, it is not too much to say that *they are a link which is not missing, but soon will be!* In my opinion they are absolutely incapable of civilization. Those who inhabit the northeast coast of Luzon hunt heads among themselves, but the only really grave problem which the people of this race present is that involved in seeing to it that they are not oppressed by their Filipino neighbors, on the one hand, and in preventing them from taking bloody revenge for past wrongs, on the other.

XUM

THE EFFECT OF A LITTLE SCHOOLING

The picture to the left shows a typical Ilongot girl as we found her. The picture to the right shows an Ilongot girl who has attended school for a time

The Negritos love music and dancing. They indulge in a monotonous crooning, varied with loud shrieks, which passes for singing. Their musical instruments are *gansas*, bamboo flutes, often played with the nose instead of the lips, and jews'-harps of bamboo. For hours at a time they keep up a monotonous circle dance, each performer having his forefinger hooked into the waistband of the skirt or clout of the person in front of him and walking, stamping, leaping into the air, or really dancing, as the humor strikes the leader of the performance, who sets the pace.

THE SUBANOS (SEE PICTURES, PAGE 1177)

The Subanos, or Subanun, inhabiting territory close to or on the coast of western and northern Mindanao are a partially Mohammedanized tribe long enslaved by the Moros, whose dress and customs they have adopted to a considerable extent, although they are not searovers. They inhabit the Sibuguey Peninsula in Mindanao. The name means "river dwellers" and is applied to these people because they live at some distance from the seashore and are met with in ascending the rivers.

A considerable number of the people of this tribe have been Christianized and a still larger number have been converted to Mohammedanism. They are essentially an agricultural and a very peaceful people and fall ready victims to their more warlike neighbors.

For many years prior to the American

BANDAGING WOUNDED IFUGAOS

In the scrambles for carabao meat, of which the people of this tribe are so fond, a number of men always get badly cut. They greatly appreciate surgical aid. The wounded man is in this instance concealed by Secretary Worcester's assistant. Some 500 Ifugaos showed their appreciation of what was being done by gathering around and singing the Ifugao love songs (see pages 1198 and 1199).

occupation of the Philippines they were preyed upon by the Moros, who enslaved some of them and exacted tribute from others.

The people of this tribe build very large houses, which usually contain but a single room, although separate stalls may be made along its sides. The floor is usually somewhat raised in the vicinity of the wall, so as to make a convenient seat. The houses are built without windows, but the siding is light and can be readily displaced in order to admit light and air. There is often, also, a space between the top of the side walls and the roof. A platform or porch in front of the door is very common. Access to the house is usually had by means of a log of wood in which steps are cut. Small houses for storing rice are usually built near the dwelling-houses.

A CURIOUS ARTICLE OF FURNITURE

Their houses may contain almost nothing, but are often abundantly furnished with china plates, brass beetle boxes and trays, bronze gongs, and large jars, the latter being especially prized. The value of the furnishings may run into the thousands of pesos. Another article commonly found in the Subano houses is the *lantaka*, or brass cannon, which is obtained from the Moros and is kept as a valuable possession rather than for actual service.

The Subanos have some manufactures, making plain earthen jars, a variety of baskets, working metal in a primitive way, and manufacturing knives of a rude sort. The women weave with no little skill.

The agriculture practiced by these people is of a very primitive type. They usually content themselves with clearing away the forest, burning the ground over and planting the seed direct without further preparation of the soil. The crops commonly raised are rice and *camotes*, supplemented with such vegetables as squashes, peppers, tomatoes, and egg-plant.

The sago palm, which grows wild, is

also a common source of food for them. They cultivate bananas and papayas.

When crops fail, the Subanos secure a fairly abundant food supply by hunting, fishing, and seeking edible roots and tubers in the forest.

Polygamy is universally allowed, but is by no means universally practiced. However, a prosperous man is likely to have three or four wives. Marriage is arranged by go-betweens. The ceremony is very simple. The couple eat together, giving each other morsels of rice, and that is about all there is to it.

It is claimed that polyandry (one woman having two or more husbands) is practiced more or less frequently among the poorer people living far back in the interior, but this fact has never been satisfactorily established. Divorce is allowed. It is arranged for by the local chief upon a proper showing of cause and the terms are settled at the same time.

The dress of the Subanos is similar to or identical with that of their Moro neighbors (see page 1177), and the same statement holds true for their ornaments, except that the women are given to wearing beads in large quantities, a custom which does not prevail to the same extent among the Moro women.

In appearance they are typical Malays.

The pagan members of the tribe are now estimated to number 30,000. I can find no reliable estimate of the number of those who have been Christianized or Mohammedanized.

THE TAGABALIES

The Tagabalies are another of the doubtful tribes inhabiting southern Mindanao and recognized by the Jesuits. They are said to occupy the region to the south of Lake Buluan as far as Sarangani Gulf and to be an unconquered people, warlike and hostile toward the neighboring Moros, Bilanes, and Bagobos, with whom they frequently fight.

I have never seen them.

THE TAGABAUAS

The Tagabauas are another one of the tribes of doubtful validity here listed. They are said to be a mixed people of Bagobo, Manobo, and Tagakaolo extraction, and to have the characteristics of these several peoples, sometimes side by side and sometimes confused with each other. They are further said to be few in number and to lead a wretched life.

I have never seen them.

THE TAGAKAOLOS (SEE PICTURE, PAGE 1180)

The Tagakaolos are the last of the tribes of doubtful distinctness here given recognized by Jesuits and some other authorities. They inhabit a part of the district of Davao, bordering on the gulf of the same name and extending from Casilaran Cove to a point a little below the River Lais; also one side of the little peninsula which ends in St. Augustine Point (see page 1180).

The Jesuits record no important facts concerning them, and I have seen them but once.

THE TAGBANUAS

The Tagbanuas are an interesting people inhabiting the interior of central and northern Palawan. They are also found on the neighboring islands of Dumaran, Linapacan, Culion, Busuanga, and a number of small islets. Their number is not accurately known, but has in the past probably been considerably underestimated. It is said that there are now 5,000 in the territory adjacent to the southernmost of the two Palawan rivers which bear the name Iuajig. There are perhaps an equal additional number in the country between this region and Puerto Princesa. How many inhabit the outlying islands we do not at present know.

The wild inhabitants of the interior of southern Palawan are locally known as Paluanes, but I cannot find that they differ in any essential particular from the Tagbanuas and consider this to be a case of two designations for one people.

The Tagbanuas are physically well developed. They are a dark-skinned people. Many of them have wavy or curly hair. I think it probable that they have in the past intermarried freely with the

A STREET IN AN IMPROVED BUKIDNON VILLAGE

"The most extraordinary results thus far achieved have been among the Bukidnons, where Lieutenant Governor Lewis has succeeded in converting rambling, ill-kept, foul-smelling *rancherias* into the most sanitary towns in the Philippines" (see text, page 1251). "Nearly all the Bukidnon villages have well-attended schools and are connected with telephone lines, which are freely used. The people are converting their beautiful and naturally rich country into a checkerboard, with roads and trails for dividing lines. They are giving up their picturesque native costume so rapidly that typical garments are even now hard to obtain" (see text, page 1193).

Negritos, locally known as Batacs, and that the latter people have partly disappeared through fusion with them.

In the northern portion of their territory the men frequently wear the clout and the women the short skirt of the savage. Further south, where they have come in contact with Moros, they have adopted the dress of the latter people, sometimes in its entirety and sometimes in a more or less modified form. The men wear their hair long. As a rule, neither men nor women have ornaments save those which they can fashion for themselves from the products of their native forests. While most of them succeed in obtaining cloth, a not inconsiderable number clothe themselves in bark.

The Tagbanuas of southern Palawan are a fairly industrious people and have in the past raised rice enough to feed themselves and their parasitical Moro neighbors into the bargain. The government is just now for the first time succeeding in its efforts to protect them from the Moros and is establishing for their benefit trading-posts where they can sell their superfluous products and obtain what they want at reasonable cost.

The Tagbanuas are expert hunters and fishermen. There are no deer on Palawan, but in this island they display great skill in killing hogs, and in Culion and Busuanga they take deer in considerable numbers, bringing them down with bows and arrows, the use of which they have doubtless learned from the Negritos.

They are very fond of music and dancing. The instruments most in use are bronze timbrels, known as *ahgongs*. They also employ bamboo flutes. Some of their dances would hardly pass muster in polite society.

THE TINGIANS (SEE PICTURES, PAGES 1185, 1187, 1188, 1190, AND 1191)

The Tingians are in many ways the most attractive of the non-Christian Philippine tribes. Although all Tingians are non-Christians, we may divide them into civilized and uncivilized groups. The stronghold of the former is the subprovince of Abra, where they exist to the number of some 14,000. They also extend over to the east into the neighboring subprovince of Kalinga and to the west into the province of south Ilocos. A few have wandered south and have settled in western Lepanto. Another small group long since strayed into northwestern Pangasinan, where their living descendants have almost lost their tribal identity. But, curiously enough, those who wandered farthest from home and established themselves in the province of Nueva Ecija have retained almost unchanged their tribal dress, manners, and customs.

Many of the Tingians are round-faced and comparatively light-skinned. The men wear their hair long and hold it in place with small turbans or narrow head bands. The typical dress of the men is still the clout, but there are few who do not possess shirts and trousers. Nearly all of them have hats, chiefly made by themselves or their Ilocano neighbors (see page 1188). Not a few have even arrived at the dignity of shoes and stockings.

The women have until recently worn only skirts of clean, white cotton cloth when at work; but of late years short-sleeved *camisas* have come into general use, and many women are now rather ashamed to be seen without these upper garments. As a rule, they wear their abundant clean hair done up in a knot at the side of the head instead of at the back. It is wrapped in beads and produces a pleasing effect.

A CURIOUS IDEA OF BEAUTY

Their characteristic ornaments, of which they are inordinately proud, are a series of armlets made of beads, which begin at the hands and in the case of a wealthy woman extend to the shoulders. It is the custom for small girls to constrict their forearms by armlets tightly fastened half way between wrist and elbow, and to leave these in place as they grow, thus ultimately producing an hour-glass effect, which is increased by the swelling of the wrists which almost invariably results. Such unsightly deformed forearms are considered as ornamental by those immediately concerned as are

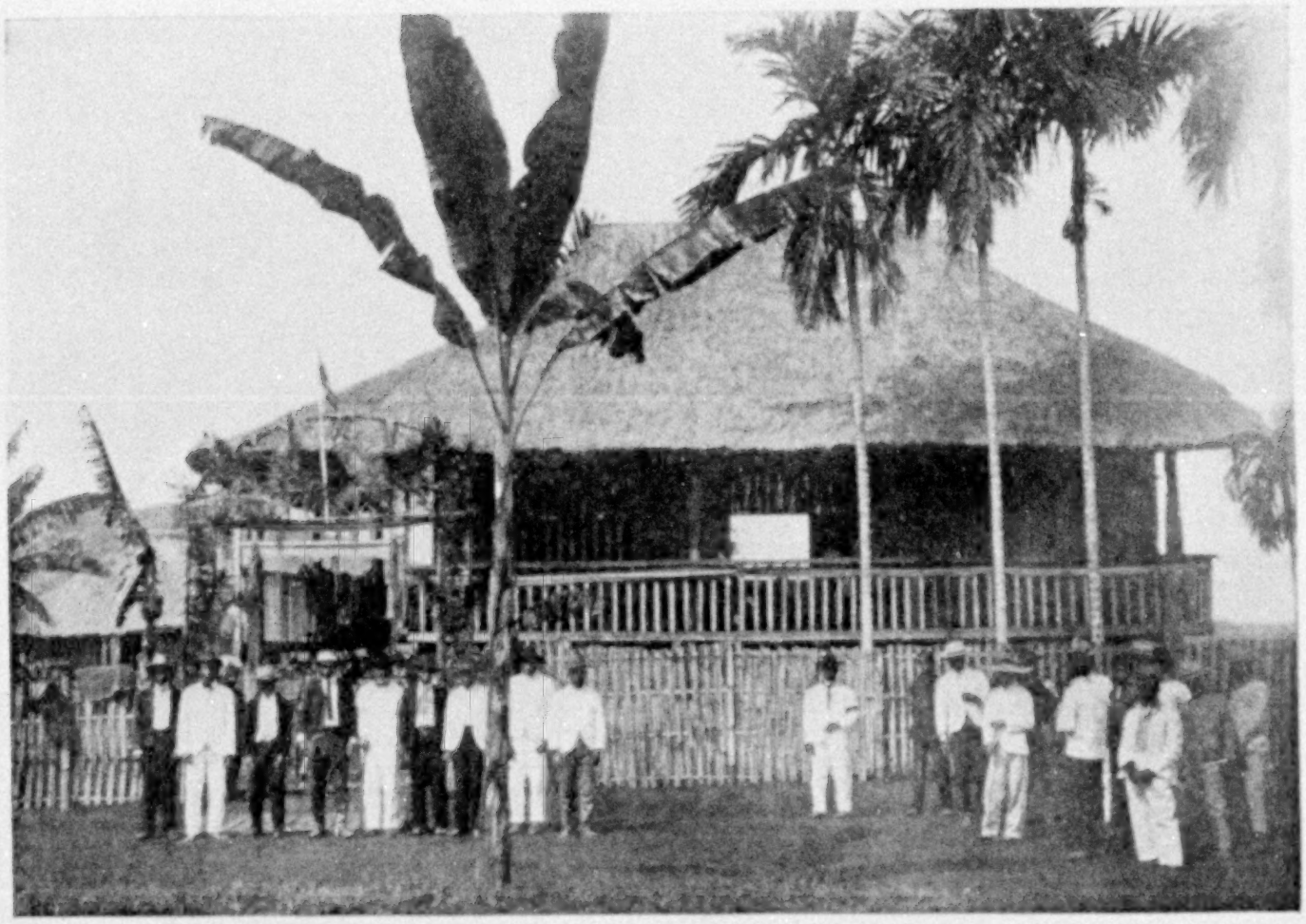
A MANOBO STREET, OLD STYLE

"The settlements of the Manobos on the Agusan River were until recently filthy and undrained. They swarmed with mosquitos and their inhabitants were, with few exceptions, victims of chronic malaria" (see text, page 1251)

XUM

A STREET IN AN IMPROVED MANOBO TOWN

"The condition of these villages is now greatly improved and some of them are really model settlements" (see text, page 1251)



A BUKIDNON PRESIDENCIA

The people of the subprovince of Bukidnon, in Mindanao, have showed a surprising willingness to come down from the mountains, settle in towns, and adopt the garb of civilization. Their villages are models of cleanliness and order, and they take great pride in building good houses. This photograph shows a *presidencia*, or municipal building, with the town officials in the foreground (see pictures, pages 1164, 1165, 1166, and text, pages 1160 and 1251).

small feet by Chinese women (see page 1185).

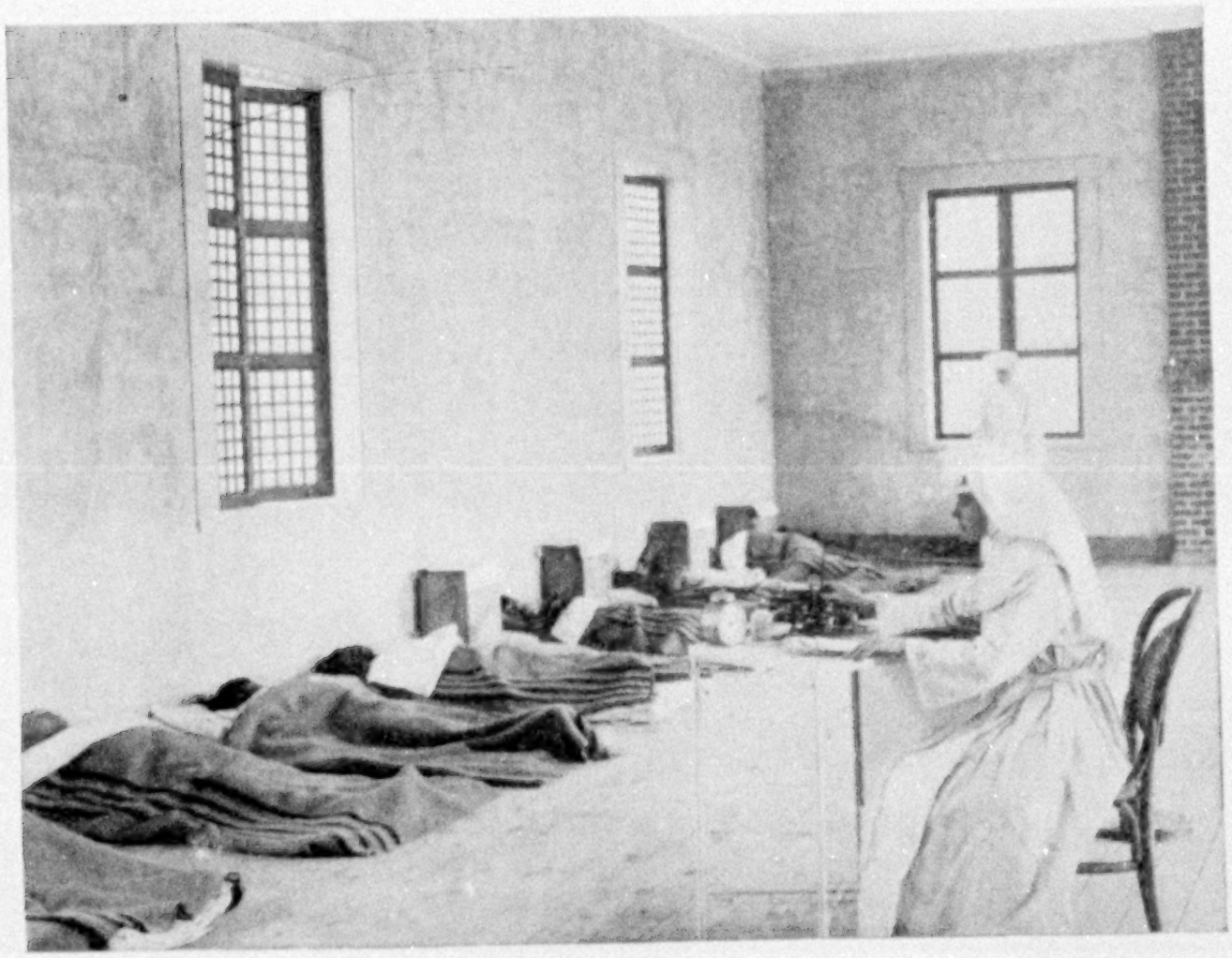
The Tingians are a kindly, gentle people, and the immaculate cleanliness of their persons and of their homes promptly commends them to the average American. Not only are their houses clean, but their cooking leaves little to be desired. It is said that a Tingian woman who serves her husband a mess of boiled rice which is dirty or even soggy exposes herself to danger of divorce. Immediately after each meal the cooking pots are taken to the river bank and scrubbed inside and out with clean water and sand, after which each is returned to its proper place in the kitchen.

The Tingians are supposed to be monogamous, but the rich men rather openly keep supernumerary wives or concubines, and their lawful wives do not seem to object to the practice.

Their houses are as good as, and often better than, those of Filipino neighbors with whom they rub elbows throughout most of the territory which they occupy. They are industrious farmers and raise horses and cattle in considerable numbers. Many of them are frugal, save their money, and become comparatively wealthy. They are a naturally pacific people, but when compelled to fight with savage neighbors in Kalinga and Bontoc have shown themselves able to hold their own.

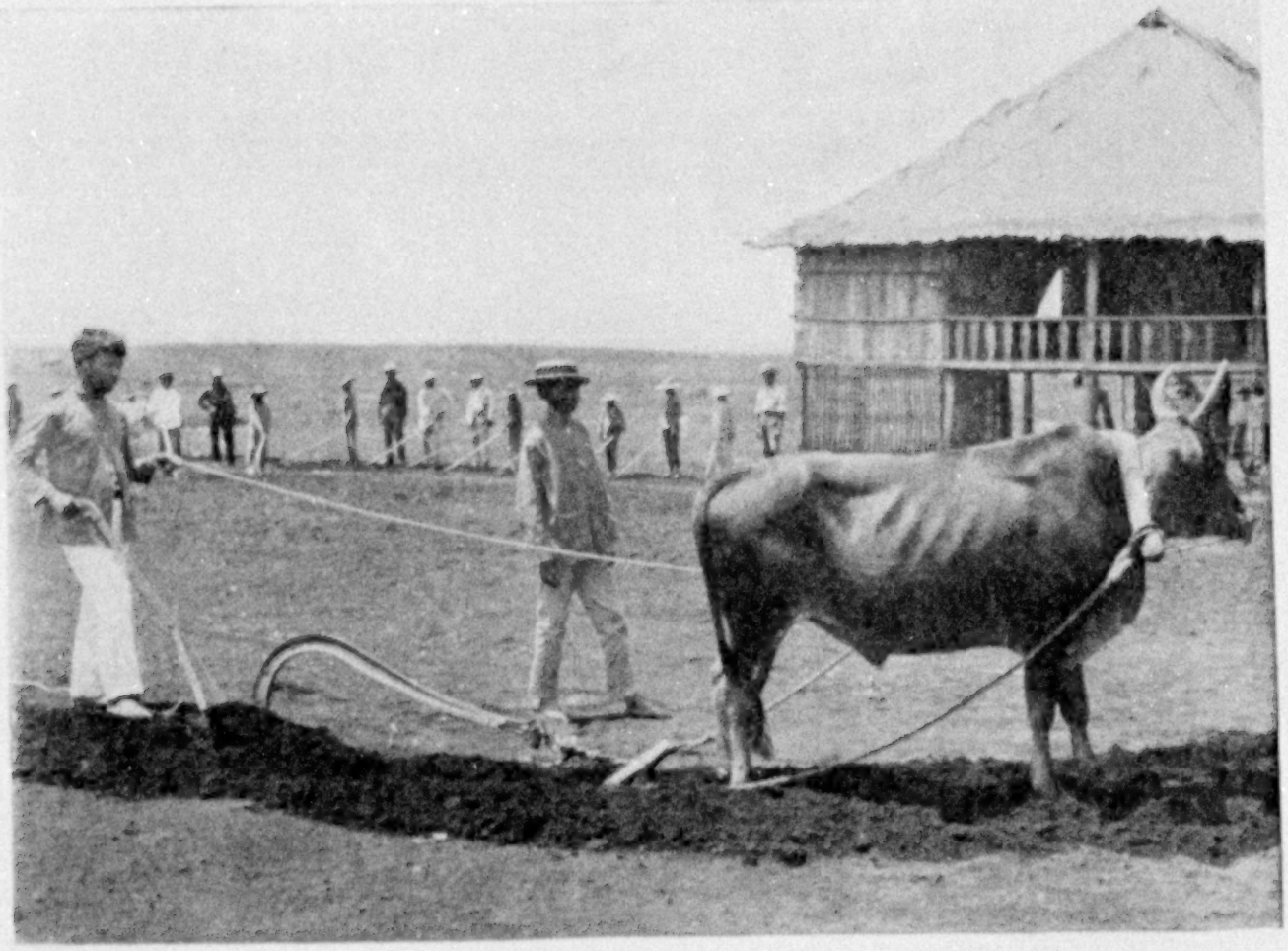
THE WILD TINGIAN TRIBESMEN

The wild section of the tribe inhabits the subprovince of Apayao. They have commonly been called Apayaos, or Kalingas. There is certainly no fitness in the latter designation. Their language closely resembles the Tingian dialect spoken in Abra; their dress is said to be practically identical with that of the Tingians who inhabited Abra a century and a half or two centuries ago. The Span-



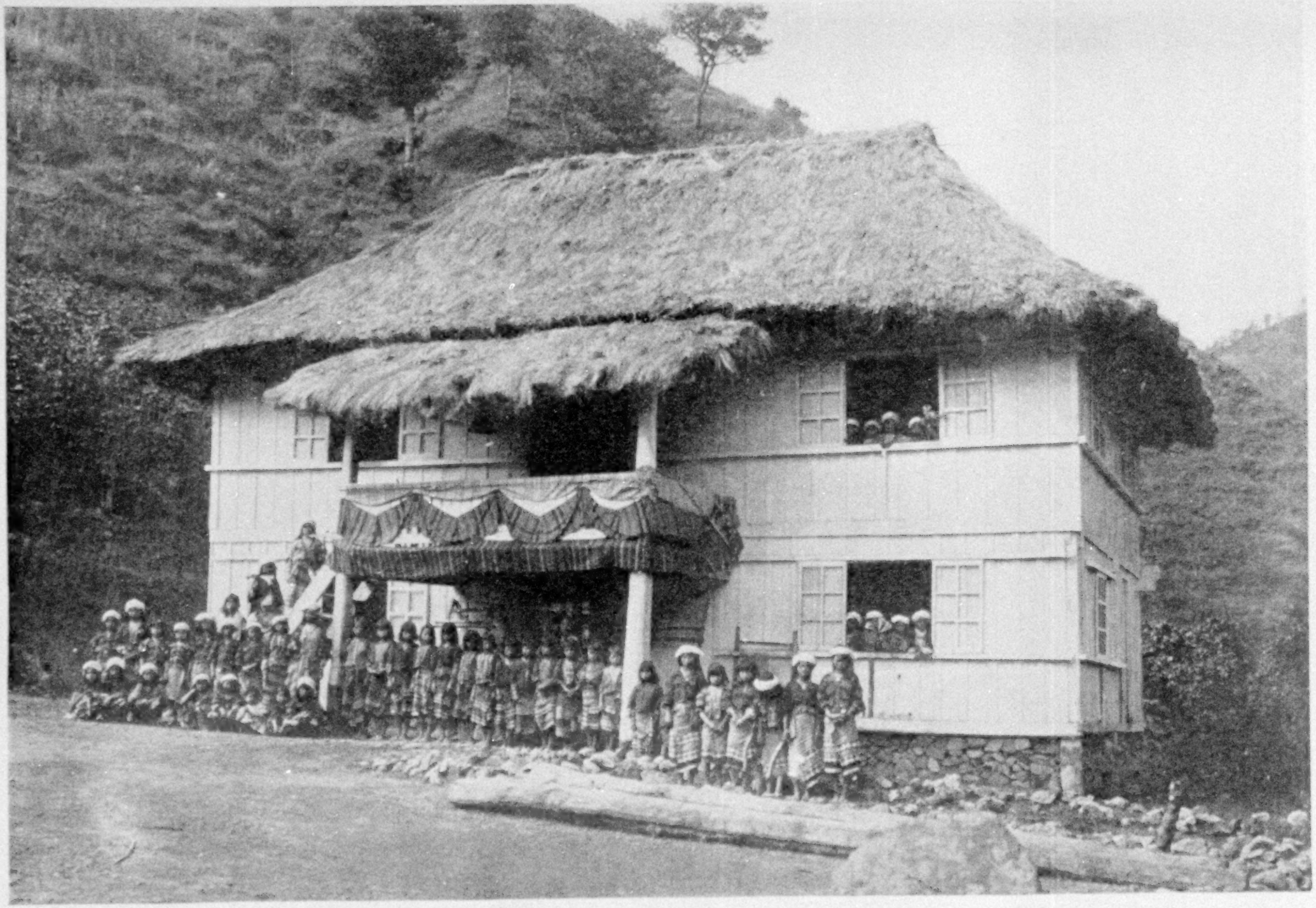
IN THE NEW HOSPITAL AT BONTOC

When the new hospital was built the number of patients requiring treatment was so great that they were very glad to accept temporary beds upon the floor until the furniture arrived.



INDUSTRIAL EDUCATION: TEACHING BUKIDNON BOYS HOW TO PLOUGH

1238



A SCHOOL-HOUSE BUILT BY BENGUET IGOROTS AT KABAYAN (SEE PAGE 1251)

The school girls who appear in this picture are dressed in cloth woven by themselves

XUM

iards never succeeded in invading their secluded valley. They are said to number 53,000, although I am inclined to think this statement exaggerated.

The men are not only long-haired, but wear switches like the Bontoc women. They bind large turbans around their heads. Some of these are of light, indigo-blue cloth, but they greatly prefer fiery scarlet and gamboge yellow stripes. Their jackets are close fitting. Their clouts are very long and are wrapped repeatedly around the waist and abdomen (see pages 1187 and 1191). They tattoo black, cuff-shaped marks on the wrists and backs of the hands, but usually leave the rest of the body untattooed. On their breasts they often wear elaborate mother-of-pearl ornaments, and they particularly like to bedeck themselves with scarlet tassels.

NO CLOTHES AND NO BATHS DURING THE PERIOD OF MOURNING

The women are inordinately fond of beads, although they do not wear such elaborate arm ornaments as do their more civilized sisters of Abra. Many of them have silver ear ornaments of a form strictly peculiar to this region. Into their hair they frequently stick miniature head-axes, which serve both ornamental and useful purposes (see page 1191). Their dress consists of the usual short skirt and a well-made upper garment, which under ordinary circumstances they are careful not to remove in the presence of men. When widowed, however, they go stripped to the waist for a period of six months, unless their male relatives take a head within a shorter time, and they also refrain from bathing. They frequently starve themselves for long periods (see page 1185).

Courtship frequently lasts for two or more years, and meanwhile young men and young women are allowed to wander off together to neighboring towns without the slightest thought of the possibility of any improper conduct on their part. The confidence of the women is really touching.

I have had the daughter of a headman step, uninvited, into my boat when I was about to proceed up the Abulug River, and in reply to my surprised inquiry as to her purpose in joining the expedition have heard her ask rather contemptuously if I did not need some one to wash my clothes and cook my rice, later discovering that her father was showing his regard for and confidence in me by sending her along, unaccompanied, to attend to such matters.

I have had an attractive woman who wanted beads perch on my knee and pat my cheek in a most engaging manner. But if in consequence I had presumed to show the slightest familiarity with her the nearest man would have sent me to another, and let us hope better, world with promptness and dispatch! All in all, life, when one is traveling among the wild Tingians, is varied but never dull.

THE WILD MEN'S EXCELLENT HOUSES

These wild Tingians build admirably constructed houses—the finest primitive structures in the Philippines. I would give much to know where they got the plan which they invariably follow. The houses are closely grouped in villages, which are laid out in a fairly definite fashion, with a place for dwellings, another for granaries, and a third for the baskets in which they deposit when practicable the heads of their enemies. There is always a group of cocoanut trees and usually a group of the palms from the leaves of which they make raincoats. Usually there is also a group of cacao trees (see page 1190).

They raise rice and corn sufficient for their own use and grow tobacco for sale in the lowlands.

In frail boats or on tiny bamboo rafts they navigate with great skill the raging waters of the Abulug River.

They all have been, and I regret to say some of them still are, inveterate head-hunters. As yet they have been only partially brought under governmental control, and this work cannot be completed until the construction of trails makes their country more readily accessible.

They are fond of music and dancing, but are apt to over-indulge in *basi* on occasion, and some of the wildest scenes

I have ever witnessed have been at their feasts. Like the Benguet Igorots, they have an inordinate fondness for dog, and on several occasions I have avoided by a very narrow margin the necessity for sharing with them this dubious dish. Considerable progress is now being made in establishing friendly relations with them, and I hope and expect that within two years we shall be on as good terms with them as we now are with the Ifugaos, Kalingas, and Igorots.

THE TIRURAYES (SEE PICTURE, PAGE 1184)

The Tirurayes are a rapidly disappearing tribe inhabiting a region extending from the lower branch of the Cotabato River south to a point a little below the Trampadidu in southern Mindanao (see page 1184). They have been raided and enslaved by the Moros until they are completely cowed, and have become almost incapable of supporting themselves. In 1900 they were said by the Jesuits to number some 10,000 individuals, but they are believed to be rapidly dying off and will probably soon disappear. I have seen them only once.

OUR EARLY EXPLORATIONS

In previous articles written for the NATIONAL GEOGRAPHIC MAGAZINE I have given some account of several of the wild tribes inhabiting the Philippine Islands, more especially the head-hunting tribes; have briefly outlined the origin and nature of legislation enacted for their benefit, and have mentioned a few of the things which have been done since the American occupation to better their condition.* Within the limits of the present article I shall attempt to give a more comprehensive view of the results actually obtained.

Obviously it was useless to attempt to improve existing conditions until we at least knew what those conditions were, and during the period from 1901 to 1907 a large amount of exploration work was therefore necessary. Of this a considerable part had to be done on foot, as the so-called "trails" were in most cases mere foot-tracks made by the wild men, over which the tough and sure-footed Philippine ponies could not even be led (see pages 1203 and 1210).

Our usual method in penetrating the great unknown region west of the Cagayan River in northern Luzon was to start on the China Sea coast, climb the Cordillera at some feasible point, and descend on its eastern side. This meant traveling with very light baggage, so that we were ill-prepared for the marked changes in temperature experienced as we ascended and descended.

The fatigue involved was so extreme that we were usually more or less reckless by the time we had followed the streams on the Cagayan side of the Cordillera until they were sizeable enough to float bamboo rafts on which we could load ourselves and our belongings and then to intrust them to the tender mercies of the current (see page 1195). A laborious passage through some long, deep lagoon, where we had to pole our rafts or paddle them with bits of bamboo, would be followed by a shoot down a foaming rapid or a drop over a fall.

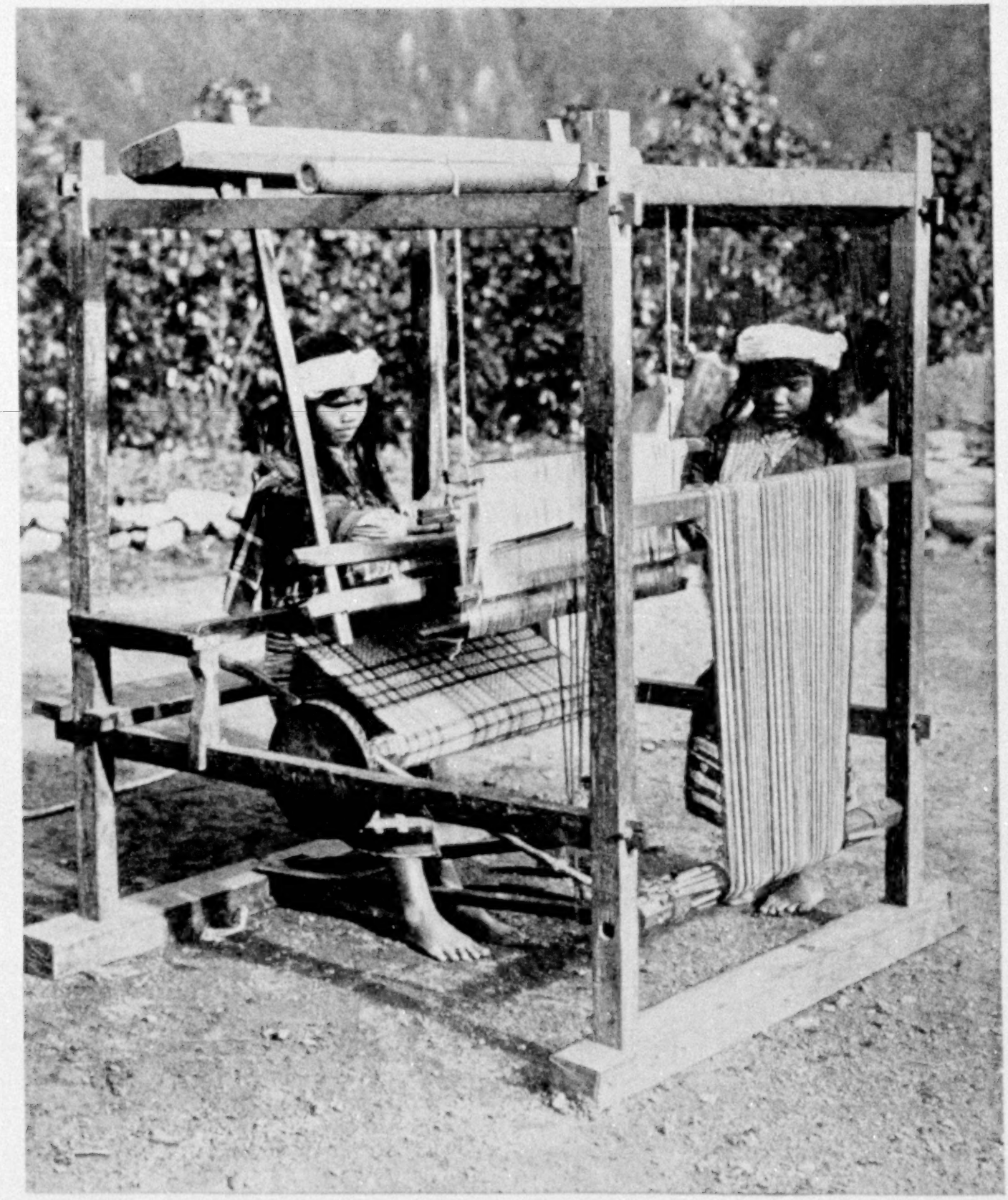
A bamboo raft 25 feet by 6 is unmanageable when once in the grip of the current, and we could seldom learn in advance what lay ahead of us. A sullen roar around a bend in the river might mean a swift and exciting rush down a foaming rapid to another deep pool, or it might mean sudden and prolonged immersion after a perpendicular drop.

Fortunately, a bamboo raft always comes to the top again, and if one hangs on he cannot drown. Unfortunately, such a raft goes to pieces if it hits a rock hard enough. Even then its component elements float; but there are drawbacks about being thumped against rocks by a raging current, although supported by a good, thick bamboo!

On one of my early trips four different rafts were dashed to pieces under me in two days, but I suffered no serious injury.

During 18 years of fairly continuous travel in the Philippines, in the course of which I have penetrated the territory of

* See NATIONAL GEOGRAPHIC MAGAZINE for March, 1911, and September, 1912.



BENGUET IGOROT SCHOOL GIRLS WEAVING (SEE PAGES 1238 AND 1251)

After these girls become skillful weavers they are given the looms which they have learned to use and are sent back to their own towns to teach others how to make cloth. The fabrics they produce are invariably of the brightest colors, but they display excellent taste in the way they combine them to produce a rich and striking effect. This can be seen by turning to the colored picture on page 1169.

IFUGAO BOYS SPLITTING ROCK

These little savages, previously absolutely without experience, learned in a few weeks to split, shape, and face rock for building stone

every tribe known to inhabit the Islands, I have never lost a man nor fired a shot, while those with me have never fired, with the sole exception of the occasion when my party walked into an ambush prepared for the provincial governor by renegade Moros on the west coast of Palawan.

On a number of occasions we should have been fully justified in opening fire, but we were determined to avoid this until the last possible moment, and it was with the result that in each case things took a turn for the better and we were spared the unpleasant necessity of falling back on brute force in order to protect ourselves.

Given a reasonable stock of good nature, a feeling of real friendliness toward the wild people, a few beads, some scarlet cotton cloth and brass wire, and, if one is in the Ifugao country, a goodly supply of narrow strips of white paper (see page 1218), and one may leave firearms behind and go far without danger of serious molestation.

OPENING LINES OF TRAVEL

The early exploration trips served to emphasize the fact that the establishment of feasible lines of travel was absolutely prerequisite to successful work among the non-Christian tribes which, with the exception of the Moros, inhabit mountainous regions in the interiors of the larger islands. Perhaps the most important thing which we have done was the opening up of such lines of travel, without which little could have been accomplished.

At the outset we had a bit of costly experience in building trails of too high grade, which were promptly destroyed by the action of water during torrential rains. Fortunately our lesson was not long delayed, and we soon discovered that in a country where 38 inches of water have been known to fall from the heavens in 24 hours the cost of maintaining a short high-grade trail between two points is so much greater than is that of maintaining a much longer low-grade trail that the original greater expense of constructing the latter is very soon more than overbalanced.

In the special government provinces coming under my administrative control I did not permit the construction of trails with a grade of more than 6 per cent except under extraordinary conditions and for short distances, and even then 10 per cent was the high limit (see page 1208). On account of limited funds the trails are built narrow at the outset, but are rapidly widened, in connection with maintenance work, until they become passable first for narrow-tread carts and then for carts of ordinary size. Any of them can promptly be converted into carriage or automobile roads by widening and surfacing.

We now have more than 1,000 miles of cart roads and trails in the Mountain Province alone, to say nothing of long stretches in the province of Nueva Vizcaya and the subprovince of Bukidnon. Work has begun in Mindoro, Palawan, and the subprovince of Agusan. Resthouses have been built at convenient intervals as required.

THE WONDERFUL SCENERY OF THE MOUNTAIN PROVINCE

It is now possible to make in perfect comfort a most wonderful horseback trip through the Mountain Province, on which one sees magnificent tropical vegetation (see page 1205) and the oaks and pine trees of the temperate zone; wild men who have always been peaceful agriculturists and wild men who until very recently have been active, and still are potential, head-hunters; mountain scenery of unsurpassed beauty (see pages 1198 and 1206), and a thousand and one things each of which makes its own strong appeal. This extraordinary opportunity is sure to be taken advantage of, and it will be but a few years until the Bontoc Igorot is hammering out head-axes for the tourist.

When I laid down on the map the general route for a main trail from Baguio, in Benguet, to Claveria, at the extreme northern end of Luzon, I did not expect to live to see it constructed. I now believe that within a year it will be possible safely to ride a spirited American horse from Bagui to Claveria without dismounting. Numerous important branch

BUILDING STONE SPLIT AND CUT BY YOUNG IFUGAO BOYS

trails have already been completed and others are under way. Deep streams and gorges are at the outset crossed by aërial "flying ferries," which are later replaced by permanent bridges (see pages 1214 and 1215).

It is a significant fact that we have never had a man murdered on one of our finished trails. The wild men have come to appreciate highly the safety and ease of travel over them and are glad to aid in their construction.

The law imposes on every able-bodied man in the special government provinces the obligation of working 10 days annually on public improvements, which usually means roads and trails or of paying a tax of one dollar; but power is vested in the Secretary of the Interior to exempt people who have not advanced sufficiently in civilization so that it seems desirable to impose this burden upon them.

It has been my policy always to pay cash for trail work at the start, and to impose the public improvement tax only after the wild men were themselves able to appreciate its benefits and were willing to pay it. The people of the hill tribes make sturdy laborers, moving earth in large quantities and showing especial ability in handling rock.

The dry stone retaining walls which they constructed are admirably built. They soon learn to handle sledge and drill, and a number of them have become quite skillful in the use of powder and dynamite.

SOME PRACTICAL RESULTS OF ROAD AND TRAIL CONSTRUCTION

The necessity of working side by side has often resulted in the establishment of friendly relations between old enemies. The cost of living has been materially decreased in the wild man's country by the improvement in means of communication, while the exportation of his surplus products has been greatly facilitated. As the result of recent road work we expect to reduce by about one-third the cost of salt used by the 123,000 people in the subprovince of Ifugao during the present year.

Another very important result is the enormous increase in the efficiency of the government police force. Ugly head-hunting towns become peaceful and law-

abiding when it is possible for the soldiers of the Philippine constabulary to drop in on them at 2.30 a. m., for the wild man does not like to be obliged to take to the hills at night when the *anitos*, or spirits of the dead, are astir.

POLICING THE HILL COUNTRY WITH WILD MEN

A noteworthy feature of the work for the establishment and maintenance of a good state of public order has been the use of the wild men for police duty. Bontoc Igorots and Ifugaos have been enlisted in the Philippine constabulary, and the people of both tribes make splendid soldiers (see pages 1222 and 1224). They are tireless on the march; they are obedient, loyal, and brave.

As they are familiar with every footpath and are not hampered with trousers or shoes when on the march, they cover their territory rapidly and completely when occasion demands. They are far less likely to commit abuses than Filipino soldiers would be, for they are dealing with their own people, while Filipinos would be dealing with people whom many of them dislike and despise.

The Ifugaos are born riflemen, and Ifugao soldiers have repeatedly come off victors in rifle matches when competing with Filipino soldiers. It would be entirely feasible to recruit and to train at small expense a force of Bontoc Igorots, Ifugaos, and Kalingas, which would defend the hill region of northern Luzon with deadly efficiency and could be employed effectively in the lowlands should occasion demand.

THE ADMINISTRATION OF JUSTICE

The administration of justice among such an aggregation of tribes, where might had always been right and where acts which civilized men consider criminal had been regarded as creditable and virtuous, has naturally involved many embarrassments. Some of the tribes had their own specific methods of administering justice and their own peculiar ways of detecting the guilty.

With the Mangyans there was a test by fire. A person accused of theft or other serious crime was compelled to grasp a piece of hot iron, which, it was supposed, would not burn him if he was innocent. If a piece of iron was not readily available, the suspected criminal was required to snatch a stone out of a boiling pot of water.

Among the Tagbanuas, when there were conflicting statements from two witnesses, both were compelled to dive into a deep pool of water and remain under as long as possible. It was held that the man who came to the top first was the liar.

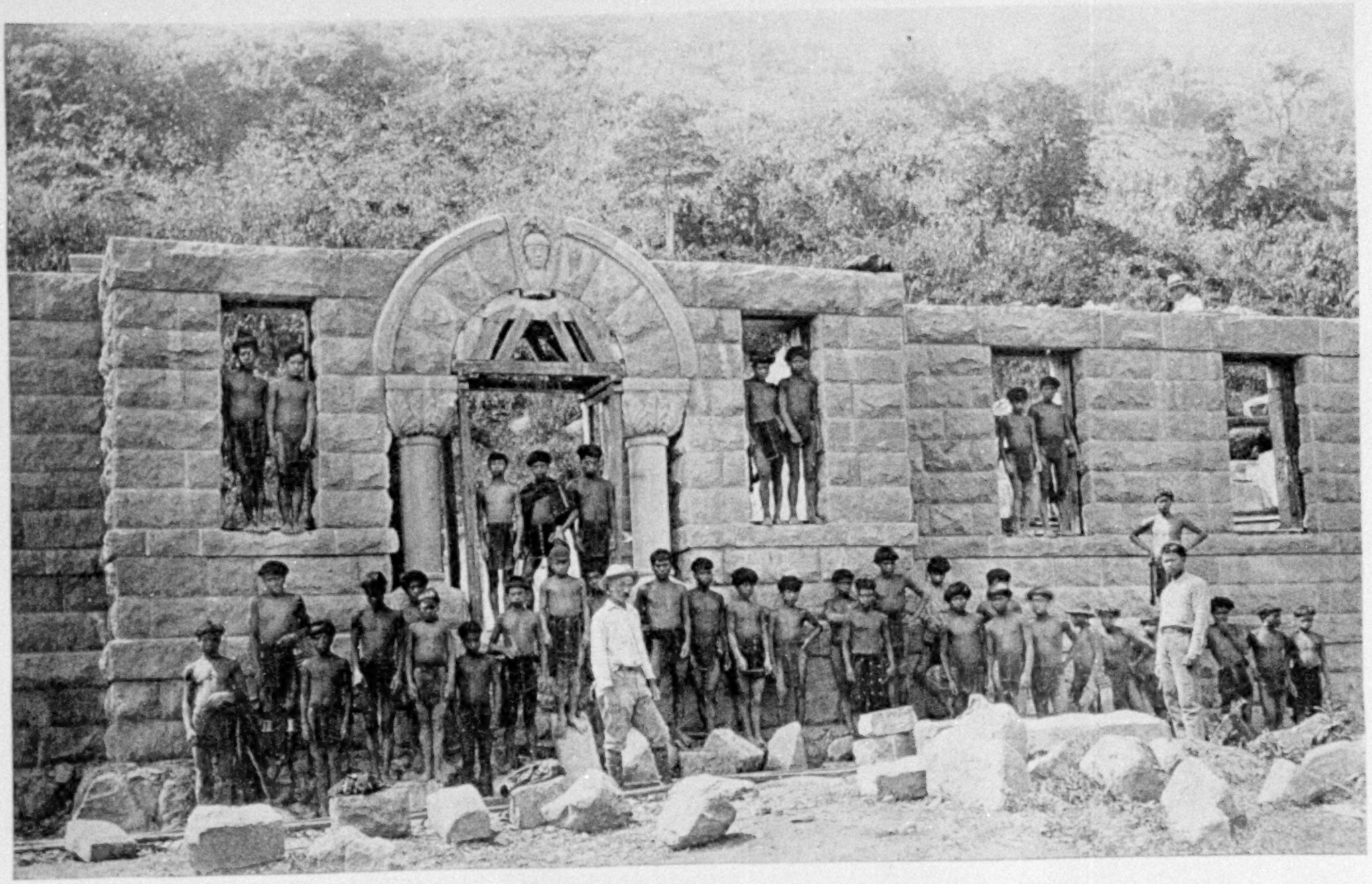
With the Bontoc Igorots bamboo lance-heads were placed slanting upward, with their points pressing against the skin at the backs of the heads of witnesses who had contradicted each other, and then at the word of command each lance-head was driven vigorously between the scalp and the skull by a smart blow with a stone. The lance-heads were then pulled out and the man who bled least freely was held to have told the truth!

If the wild man knew of courts at all he had only fear of them, for in the old days he never went to court unless compelled to do so by some member of a Christianized tribe, and then he invariably lost.

From the early days of the appointment of American governors the wild men have come to them to have their difficulties settled, having soon learned to have an abiding faith in the honesty and fairness of these officials. This naturally led to the conferring of specific authority on the latter in order that their decisions might have the force and effect of law.

All governors and lieutenant governors of special government provinces and subprovinces are now justices of the peace, with jurisdiction throughout their respective territories. In general we have refrained from going into ancient history, and have informed the wild men that as far as concerns the past we shall let bygones be bygones, but that in future murders and other crimes will be severely punished.

Thus far they have displayed an unanticipated willingness to allow their troubles to be settled in court; but justice as



STONE WORK DONE BY IFUGAO BOYS

At Quiangan a stone school-house is being built by Ifugao boys, who have cut, faced, and laid the stone. This photograph also shows the boys who did the work and the American who taught them to do it

XUM

A SCHOOL-HOUSE AT BONTOC

Most of the stone and brick was laid by Bontoc Igorots

previously administered by them had at least an advantage in that punishment for evil doing was *prompt*, and they have naturally been impatient over the law's delays. The only complaints they have made relative to sentences have been that they were not severe enough, the Supreme Court of the Philippines having thus far commuted nearly all death sentences imposed on wild men.

ONE METHOD OF OBTAINING SWIFT JUSTICE

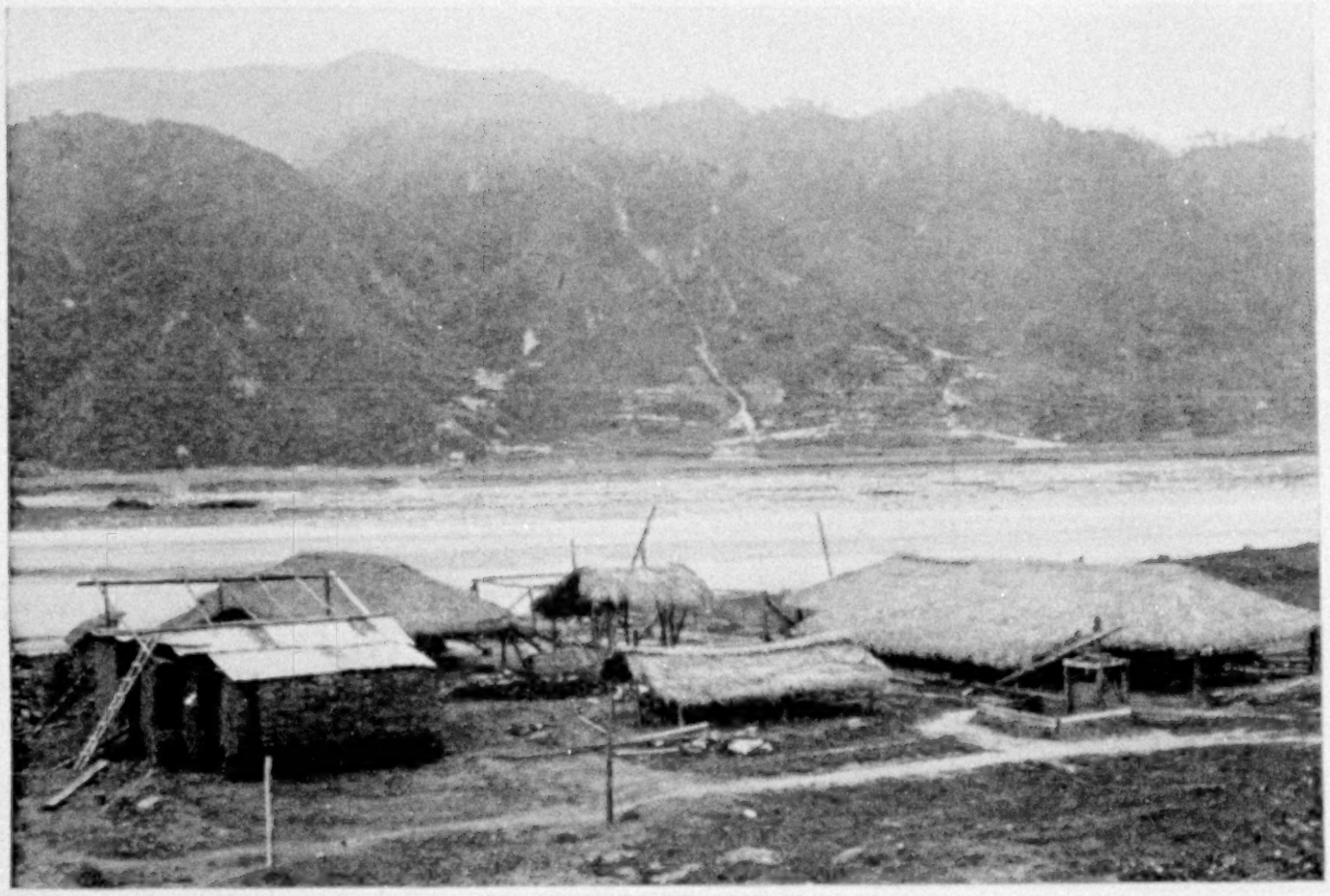
Last year a Bontoc Igorot policeman shot and killed the Igorot *presidente* of Tinglayen, a former head-hunting town, whose inhabitants are particularly warlike. There was no excuse for the act of the policeman, which was nothing less than an unprovoked murder. Some of the more unruly inhabitants attempted to kill him, but he was defended by the better element, including a famous fighting chief named Agpad, and the son of the man who had been shot, on the ground that the government had undertaken to kill evil-doers, and that this murderer *must be turned over to the government to be killed!*

They were, however, anxious for prompt action, and feeling that the self-restraint which they had shown entitled them to it, I arranged for a special session of court at Bontoc. Immediately after the hearing of the case had been completed, the judge asked the lieutenant governor of Bontoc whether the latter official thought there was any particular reason why he should not delay his decision in the case. The lieutenant governor replied that he thought there was. The judge rather indignantly inquired what that reason might be; whereupon the lieutenant governor led him to the window and showed him some 500 Tinglayen warriors, armed with shields, head-axes, and spears, standing on the hillside just outside the court-room and quietly awaiting the verdict. The judge's decision was rendered without delay!

The frankness with which guilty wild men tell the truth is sometimes rather appalling, and their ideas as to right and wrong are calculated rudely to shock the unitiated.

OUR JUSTICE NOT ALWAYS COMPREHENSIBLE TO THE WILD MAN

A wild Tingian named Abaya, of Apayao, had a so-called *comisionado*, or



A BRICK-YARD OPERATED BY BONTOC IGOROTS

All of the bricks for public buildings at Bontoc, the capital of the Mountain Province, are now burned, and most of them are laid, by wild men

agent, who sold his products for him at the provincial capital of North Ilocos. The *comisionado* in turn had a Negrito slave, whom he suspected of designing to escape. When Abaya came in with a back load of tobacco the *comisionado* directed him to take his head-axe and kill the slave, who was cutting firewood in a neighboring grove. The *comisionado* further told Abaya that he himself would kill a big hog and give him half of it in payment for his services. Abaya cheerfully sought out the unsuspecting Negrito, whom he attempted to decapitate with a terrific blow.

The Negrito jumped in the nick of time and the keen edge of the head-axe struck his shoulder instead of his neck, inflicting a dreadful wound. Why he did not drop in his tracks and die no one can explain, but in point of fact he ran away so fast that his would-be executioner could not catch him.

When Abaya returned from an unsuccessful pursuit, he was immediately arrested on a charge of attempted murder and incarcerated in the provincial jail.

On being brought before the judge and interrogated as to whether he had tried to kill the Negrito, he stated that he had made an honest and earnest attempt to carry out the instructions of his *comisionado*, as it was his custom to obey the "authorities!" He further strenuously insisted that he was not to blame for the Negrito's escape, arguing that any ordinary well-regulated man would have died promptly, even of such an injury as he had managed to inflict, and that it was no fault of his that the Negrito had displayed such extraordinary vitality. He further said he had done all in his power to run the Negrito down; that he was guiltless of any intention to let him escape, and was merely the victim of an unprecedented and unforeseeable combination of circumstances!

What was the judge to do in such a case? What he *did* do was to give Abaya the minimum penalty under the law for having afflicted *lesiones graves* (serious injuries) on the Negrito.

When I secured his pardon some time

later, he still believed that he had been in prison for failing to kill the Negrito!

Such primitive conditions are, however, rapidly becoming things of the past. The wild man has yielded with unanticipated readiness to what he doubtless regards as the peculiar prejudices of his American rulers.

HEALING THE SICK

The healing of the sick and injured has now begun to play an important part in the civilization of the non-Christian tribes. It is practicable to protect the hills of northern Luzon from invasion by contagious disease originating in the lowlands on account of the ease with which land quarantine can be successfully maintained; and, although cholera has three times sneaked over the boundary line of the Mountain Province, it has in each case been promptly driven back.

Systematic vaccination is now rapidly decreasing the mortality from smallpox, which has in the past been a dreadful scourge among the hill people. The belief that the *anitos,* or spirits of the dead, cause sickness, wounds, and death has been prevalent among them, and their method of seeking to obtain relief from their ailments has been to sacrifice chickens, pigs, or cattle, according to their means; but they have been quick to grasp the fact that the white man's method is vastly better.

There is a well-equipped modern hospital at Baguio, in the subprovince of Benguet, and Igorots sometimes travel 100 miles to get to it. There is also a hospital at Bontoc, a well-equipped modern building, which has recently replaced a temporary hospital established some years ago. The clinic at this place is increasing by leaps and bounds.

A horrible disfiguring disease known as "yaws" is quite prevalent among the hill people and causes them much suffering. Dr. Richard P. Strong, director of the Biological Laboratory at Manila, discovered the fact that Ehrlich's "606" was an absolute specific for this infirmity.

Subsequently a man badly afflicted with it was found at Barlig, one of the wildest settlements in Bontoc. He declined to go to the hospital for treatment and was sent there in charge of an Igorot deputy sheriff. He received the necessary injection, but during the first two or three days complained bitterly that no medicine was being put on his sores. Then he suddenly became convinced that the medicine he *had* received was "very strong." Within a week he was running around town and triumphantly displaying his rapidly healing body to every one who would look. Then he suddenly and unaccountably disappeared, only to reappear a little later, bringing with him for treatment every man, woman, and child of Barlig who had yaws!

Relievable eye troubles are frightfully prevalent among the hill people. Indeed, until after the American occupation the law of the survival of the fittest did its work, absolutely unimpeded, throughout this whole region, and every year many thousands of people were permanently incapacitated or died needlessly.

HOW AN IGOROT DISCOVERED CHRISTMAS PRESENTS

The pleasant thing about our efforts for the relief of suffering is that they are highly appreciated. Sanitary Inspector Barron nursed the only son of a rich, influential old Benguet Igorot chief named Palasi through a vicious attack of confluent smallpox and saved the boy's life. Palasi was anxious to pay him, but the provincial governor refused to permit this, because the inspector was paid by the government for doing just such work.

Nine months later, just before Christmas, Palasi appeared at Baguio and called on the governor. He said that he had heard of a strange American custom and wished to learn more about it. He asked if it was true that Americans gave presents to their friends at Christmas time. Being answered in the affirmative, he inquired further whether it would be right for the Igorots to adopt this good American custom.

Having been told by the unsuspecting governor that it would be highly proper, he stated that he was going to make Mr. Barron a Christmas present of his best horse, which he did!

XUM

1250

A BAND OF BUKIDNON BOYS

Here is a fine example of the kind of educational work that is being done in the Philippines. When the boys, shown in the picture, first came to school not one of them knew a note of music; now this band can play any variety of music, from rag-time to light opera

I myself, in the course of my journeys among the wild men, have been compelled to prescribe for every conceivable ailment and have done quite a bit of "jack-knife" surgery (see page 1230). Were I a young man and possessed of adequate knowledge of the science of healing, I would ask for nothing better than to be a physician to these people. One would not grow rich at it, but he would certainly be an uncrowned king.

Medical and surgical work are now being inaugurated in the province of Agusan, where a temporary hospital will soon be replaced by a permanent one, and where, as in the Mountain Province and Nueva Vizcaya, this work will exert a potent influence in maintaining and extending the friendly relations now existing with these people, in the absence of which we could not accomplish a tithe of what is actually being done for their betterment.

SANITARY WORK

Sanitary work among the wild men is beset with difficulties. The savage is usually glad enough to have one relieve his sufferings, but in many cases he strenuously objects to one's compelling him to clean up his premises or his person.

In this regard there are wide differences between the several tribes. The Negritos are not far above the anthropoid apes, and the Ilongots and the Mangyans have advanced but little beyond the Negritos. The Bontoc Igorots are filthy, and while Governor Pack, of the Mountain Province, insists that the Benguet Igorots are just *naturally dirty* rather than filthy, I venture to disagree with him. The Ifugaos are comparatively clean. The Kalingas are more so. The Tingians are one of the cleanliest peoples in the world. Improvement among the Benguet Igorots is now very noticeable.

The settlements of the Manobos on the Agusan River were until recently filthy and undrained. They swarmed with mosquitos, and their inhabitants were, with few exceptions, victims of chronic malaria. The condition of these villages is now greatly improved and some of them are really model settlements (see pages 1234 and 1235).

The most extraordinary results thus far achieved have been among the Bukidnons, where Lieutenant Governor Lewis has succeeded in converting rambling, ill-kept, foul-smelling *rancherias* into the most sanitary towns in the Philippines, leaving little room for further improvement (see page 1232).

PRACTICAL SCHOOLS FOR THE WILD MEN

School work began promptly as soon as the wild man's territory was made accessible and reasonably safe. It has been vigorously prosecuted ever since with varying success. So far as my knowledge and information go, every effort thus far made to educate the Negritos has failed utterly. In my opinion, success cannot be hoped for.

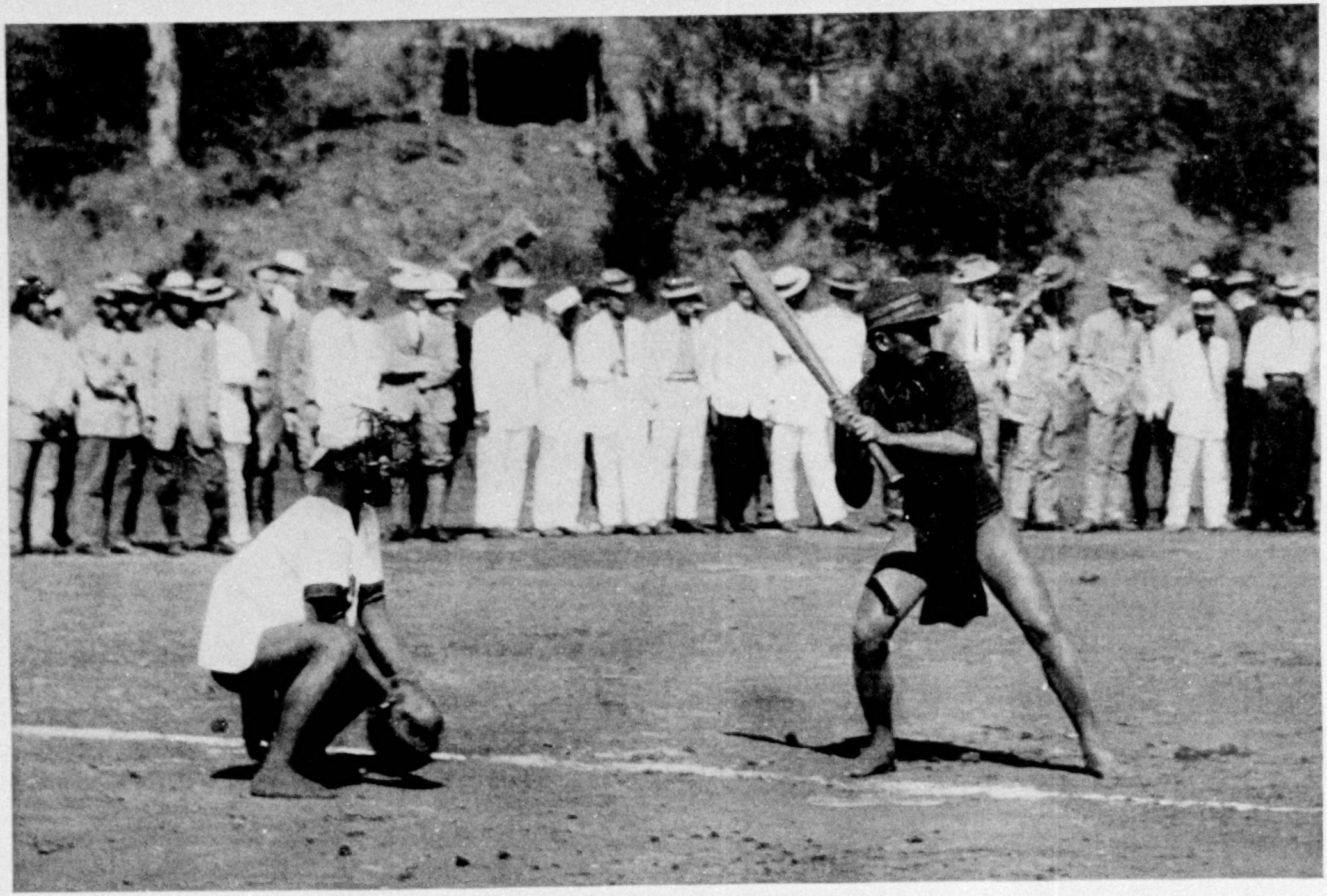
These people are born nomads of very low intelligence, and all that we can hope to accomplish for them is to restrain their mischievous, and occasionally criminal, tendencies, and at the same time to protect them from injustice and oppression at the hands of their neighbors. This is being done with a reasonable degree of success in Bataan, Zambales, Pampanga, Pangasinan, and Apayao. Nothing has as yet been done for the Negritos of the east coast of northern Luzon, who are abundantly able to protect themselves, nor for those of Panay and Negros.

English is taught in all schools. For the Benguet Igorots there are schools affording to both boys and girls practical industrial training, which not only furnishes them necessary mental discipline, but increases their wage-earning capacity. Many of the Benguet towns already have secretary-treasurers, educated in the schools of this subprovince, who can read, write, cipher, and keep books. Girls are taught to weave cloth on simple looms and are then allowed to take the looms home with them (see page 1241). They soon teach others this valuable accomplishment.

INDUSTRIAL TRAINING A MARKED SUCCESS

Among the Ifugaos the limited amount of work now in progress is also largely

XUM



AN IGOROT BASEBALL GAME IN PROGRESS

"I have not previously mentioned what I believe to be the fact, that baseball is one of the really important things which the Bureau of Education has taught the boys. . . . These games serve to bring the people together and result in endless good" (see text, page 1253)

industrial. Boys are taught woodwork, at which they excel; stone splitting and cutting, at which they are very skillful (see pages 1242, 1244, and 1246), and iron work, in which they are very much interested. Girls are taught to weave and sew.

Neither in Lepanto nor in Bontoc have educational results of any material importance been obtained as yet, but the recent adoption of a sensible policy involving the laying of great emphasis on industrial training leads me to believe they may be looked for in the near future.

There is one quite successful school among the Ilongots, and here again industrial work is the principal thing taught.

If nothing more were accomplished than to persuade these especially filthy little savages to clean up, the work would be worth while. As a matter of fact, they display a wholly unanticipated degree of intelligence.

No educational work has as yet been inaugurated among the Kalingas or the wild Tingians of Apayao, but good schools were long since established for the civilized Tingians of Abra, who have already greatly profited by them.

The Bukidnon people of Mindanao were most anxious for schools, and one of the potent arguments used in persuading them to come down from the hills and to settle in organized villages was that if they failed to do this it would be impossible for us to provide schools for their children. Every little Bukidnon village has built a good school-house and a dwelling for the schoolmaster, and the children are making extraordinary progress.

In a number of cases it has proved better to establish boarding-schools for the boys and girls of a non-Christian tribe rather than to attempt to send schoolmasters into extremely isolated places, where they would find it difficult to secure proper food and would suffer greatly from loneliness. Such a school has been established for Tagbanau boys at Aborlan, in Palawan, and should meet with a large degree of success.

THE WILD MEN TAKE TO BASEBALL

In a previous article I have referred to the beneficial results which have followed from the introduction of field sports among the adult wild men of northern Luzon, but I have not previously mentioned what I believe to be the fact, that baseball is one of the really important things which the Bureau of Education has taught the boys.*

It is really wonderful to see how they take to the game and how it brightens them up and increases their activity and alertness. Keen interest is taken not only by the boys themselves, but by their fathers and mothers, in competitive games between different settlements. These games serve to bring the people together in a friendly way and result in endless good (see pages 1252 and 1255).

THE WILD MEN PROTECTED FROM DANGEROUS INTOXICANTS

Prohibition of the use of intoxicants other than those which he himself manufactures and has always been accustomed to employ is one of the greatest boons conferred on the wild man by the government. A Filipino seldom becomes a victim of alcoholism. He may take an occasional drink of vino, tuba, or beer, but he almost never drinks to excess. In this regard the wild man differs radically from him.

There are tribes among whom it is hardly good etiquette to leave a *fiesta* sober. Only fermented drinks are made by these people, the chief materials used in their manufacture being rice, corn, the juice of sugar-cane, and that of several different species of palms. These drinks are for the most part comparatively mild, and must be guzzled in large quantities in order to produce advanced intoxication.

When these people, accustomed to nothing stronger, drink bad vino or worse whiskey to great excess the results are shocking. They promptly get so drunk that the whole universe apparently seems to reel around them. At all events, they obviously think that they have to hang on to the grass in order to stay on the ground! I have repeatedly known indi-

* See "Field Sports Among the Wild Men of Luzon," March, 1911, NATIONAL GEOGRAPHIC MAGAZINE.

XUM

viduals to kill themselves outright by overindulgence in the white man's strong liquor.

Furthermore, a wild man who has once developed a taste for it will work to get it when nothing else will induce him to work. It became known to me that unscrupulous persons were taking advantage of this weakness to sell bad liquor to the wild men in large quantities and to secure them as laborers at small expense.

I am not a believer in the enactment of prohibitory legislation which cannot be enforced; but it happens that conditions as to transportation are such, in much of the mountain territory, as to render it comparatively easy to prevent the importation of liquor, and since the desirability of doing so was evident, I drafted and submitted an act which has been successfully enforced with very gratifying results. In the Agusan Valley, for instance, the chief transportation business a few years since was the shipment of *vino up* river. Today the principal transportation business is the shipment of *hemp down* river.

OPIUM NOT USED

The use of opium is at present practically unknown among the people of the non-Christian tribes except the Moros, and with the existing prohibitory legislation we should, theoretically, be able to keep it so. Unfortunately, the facility with which opium can be smuggled is so great as to render legislation prohibiting its use largely farcical, and until the evil is checked by limiting production in the countries where the drug is grown its use will inevitably continue to spread.

AS TO CLOTHES

No efforts have been put forth to persuade the wild people, other than school children, to adopt the garb of civilization. This will surprise, and may even shock, many good people who have grown up in the belief that there is an intimate and necessary relationship between the clothing of the human body and morality in sexual relations. Such people will be still more surprised to learn the hard fact that the morality of a number of the almost naked tribes of the Philippines is, in such matters, far above that of any civilized nation in the world; and that, curiously enough, some of the most fully clad Philippine wild tribes fall farthest below the ordinary standard of civilized peoples.

Furthermore, it is a sufficiently well-known fact that the health of men who have been accustomed to wear only clouts is often prejudicially influenced when they don shirts or trousers.

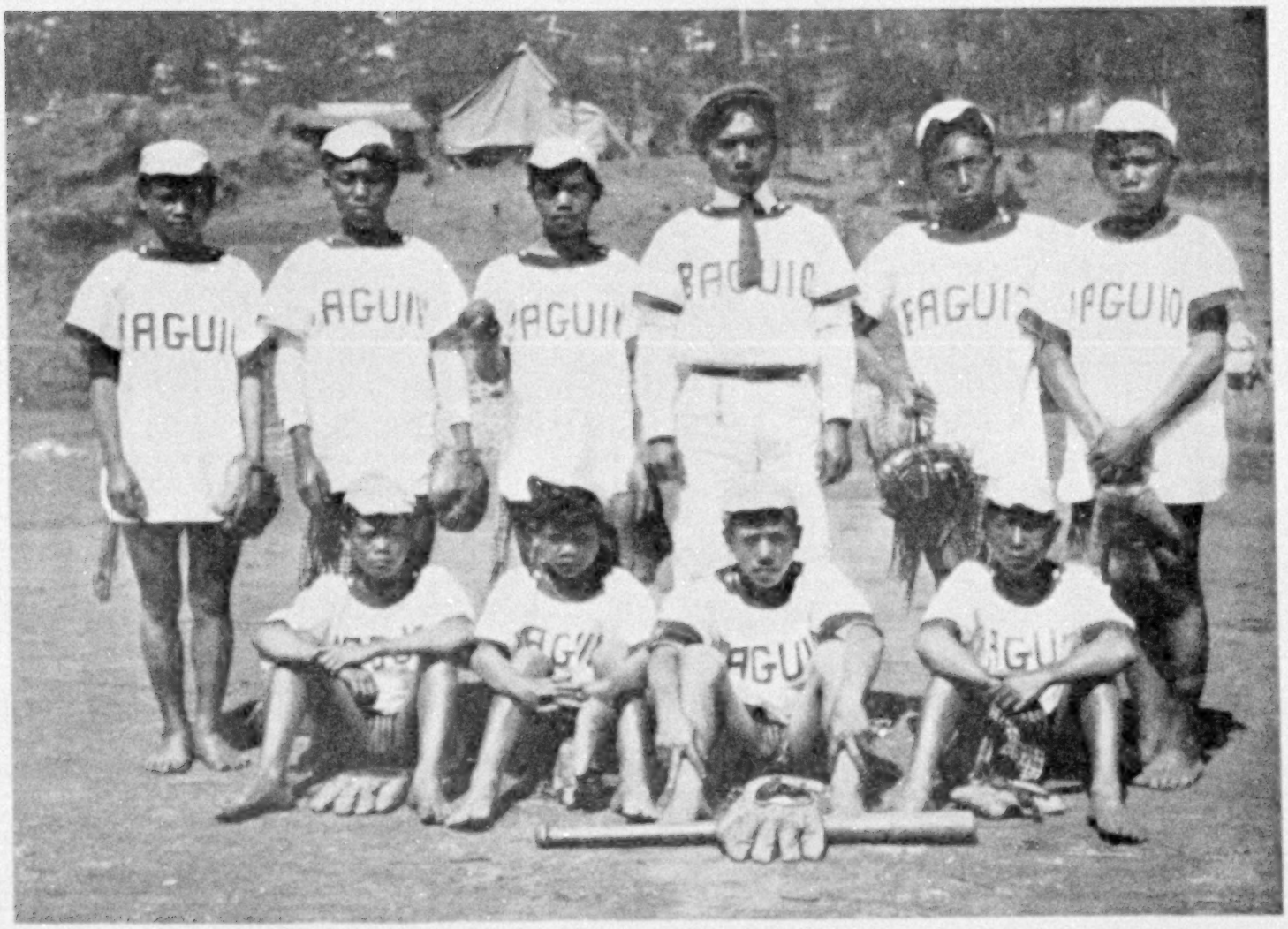
We have therefore been content to let the inevitable change come about gradually, and I, at least, have regretted the rather rapid disappearance of some of the more striking and attractive of the native costumes.

When the wild man acquires clothes, he usually begins at the top and works downward. A hat is the first article purchased; then comes a shirt or coat; then shoes. Trousers are donned last of all, if at all.

When the boys' school at Baguio was opened, the pupils were fitted out with natty blue uniforms. Shortly afterward I met six of them returning to Baguio after spending Saturday and Sunday at home. They were wearing their caps and coats, but their trousers were suspended from the ends of sticks carried over their shoulders!

For some reason the idea gained prevalence among the Benguet Igorot *presidentes* of towns that their official position required the adoption of civilized dress, but they nevertheless complained bitterly that trousers *tired* them, and requested vacations from time to time in order that they might retire temporarily from public life and take off these uncomfortable garments.

When on my earlier trips through the Luzon Mountains I was slipping and sliding over water-worn rocks and scaling cliffs with shoes worn out, feet torn and bleeding, and life and limb consequently imperiled, I envied my wild companions the tough natural sole leather on the bottoms of their bare feet. It never wore out, seemed impervious to cuts, and, aided by prehensible toes, gave



A BASEBALL TEAM OF BENGUET IGOROT BOYS

the savages a far surer foothold than the most perfectly constructed hobnailed shoes could possibly afford a white man.

GOVERNMENT EXCHANGES

In the old days the wild man was invariably shamefully cheated when he attempted to barter the products of his native mountains with his "Christian" neighbors in the lowlands for salt, cloth, steel, and similar necessary articles. Furthermore, it was part of the game to get him intoxicated in order that he might the more easily be robbed; and this, combined with the tendency of the sudden change in climate involved in descending from the mountains to the lowlands to bring out malaria, often produced fatal illness. At the best he was usually compelled to sell his produce at a small fraction of its true value and to pay three or four prices for everything that he bought.

With a view to remedying this situation, we have established a number of so-called "exchanges," which are nothing more nor less than government shops, where the wild man may purchase at a fair price the things which he needs and may sell his produce at its real market value. He may also sell his weapons and other manufactured articles if, as is often the case, they are of a sort which can subsequently be sold to civilized residents of the Philippines or to tourists.

The result is that many of the wild men can purchase what they want in their own country at reasonable prices, and can dispose of what they have to sell without being cheated. They are quick to take advantage of the opportunity thus afforded, and their willingness to work increases proportionately to their desire to purchase the goods which are displayed at the government exchanges.

With the average wild man life is one long struggle to get sufficient food for himself and his family. One of the things which we are endeavoring to do is to

show him how he can accomplish this result with greater certainty and less exertion. We are also gradually bringing about the raising of coffee, cacao, and similar crops, which can bear the heavy cost of transportation to the coast and still be sold at a profit.

The people of Bukidnon, many of whom lived on rich and fertile plains, actually believed that it was *necessary* to go to the forest-clad mountains and clear away the trees in order to get ground on which food products could be raised. The introduction of a few disc plows, with the necessary work animals, soon demonstrated to them that the splendid prairie soil at their very doors would produce far larger crops than they had been able to get on the mountain sides with all their hard work.

Now the plows are kept going night and day through the greater part of the year. In one town, where a plow arrived in advance of the cattle to pull it, 15 men promptly hitched themselves to it and kept it moving until the work animals arrived!

In my opinion, Rizal's dictum that the future of the Philippines lies with the people of the mountains is likely to prove a true saying. Their courage, loyalty, and industry are admirable qualities on which to build, and if the "fair-deal" policy which has been inaugurated is steadily adhered to they will go fast and far.

I have purposely omitted all reference to the great work that has been done in the Moro Province, which makes a story by itself. It is a story of surpassing interest, and it ought to be told by some one of the many men who have played an important part in the work. I myself have had no direct connection with it.

The men who are entitled to the lion's share of the credit for what has been done for the non-Christian tribes of the Philippines under American rule are the provincial and subprovincial officials, who, in the face of innumerable and apparently insuperable obstacles, have carried on their country's work with dogged persistence and unfaltering courage, content to do the right thing *because it ought to be done*. A Kipling would find abundant material in the life of any one of them for a true story of absorbing interest, but no one of them would thank him for telling such a story.

If through the medium of this article I succeed in conveying to some of their countrymen even a vague idea of the task which they have undertaken and of the success they have achieved, I shall be more than satisfied.

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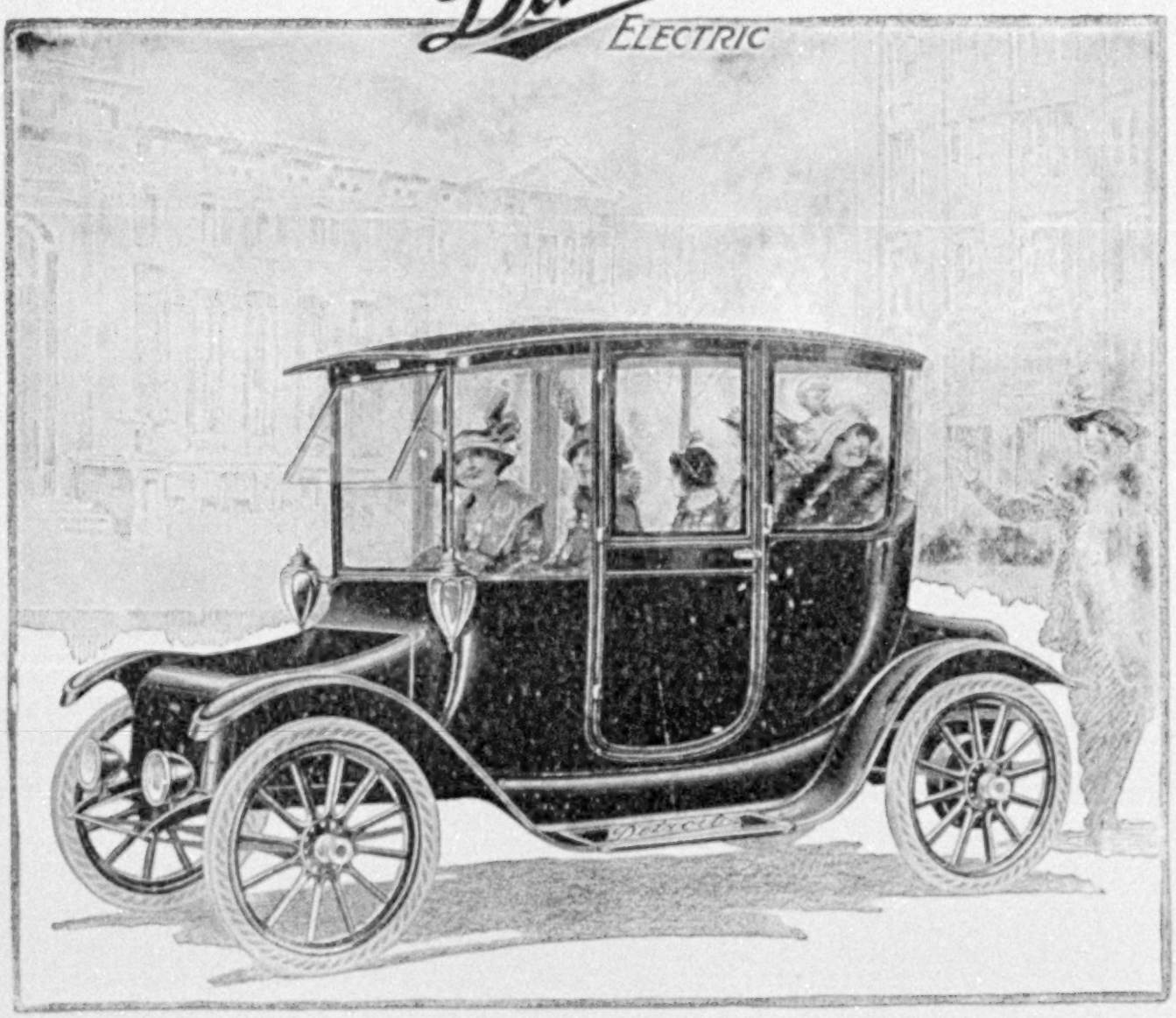

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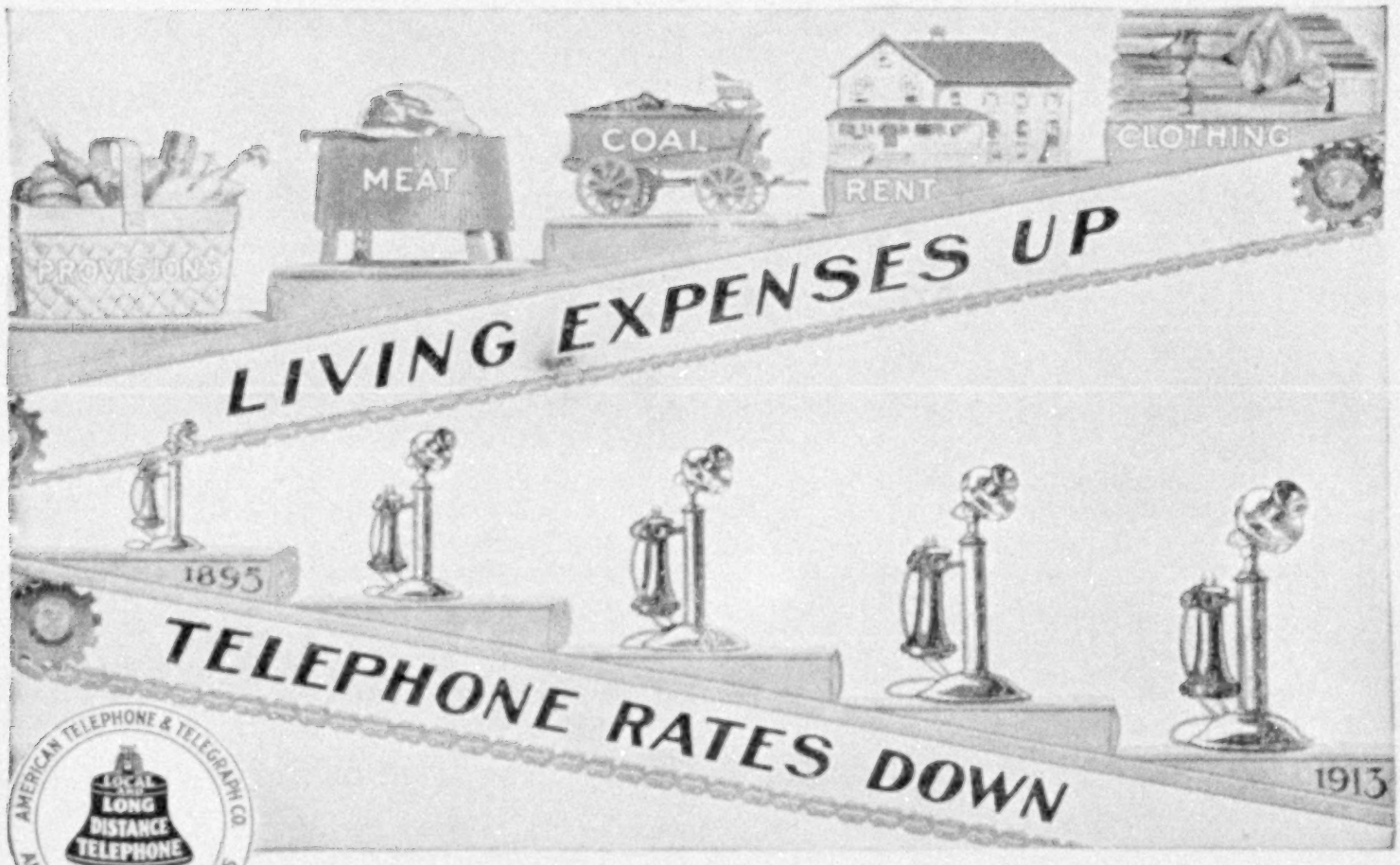

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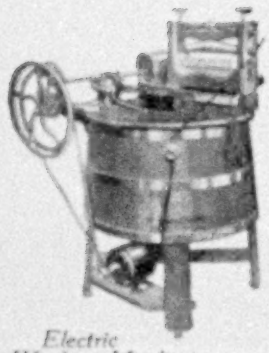

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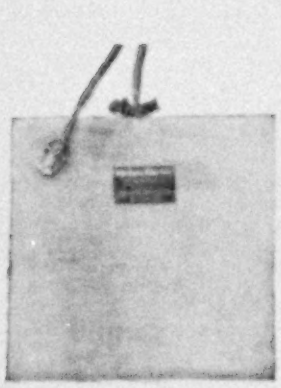

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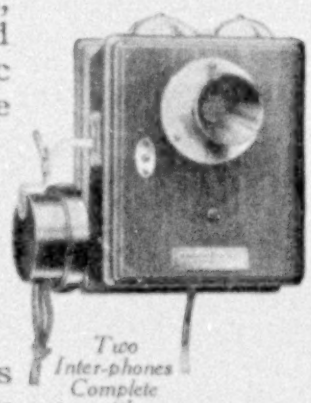

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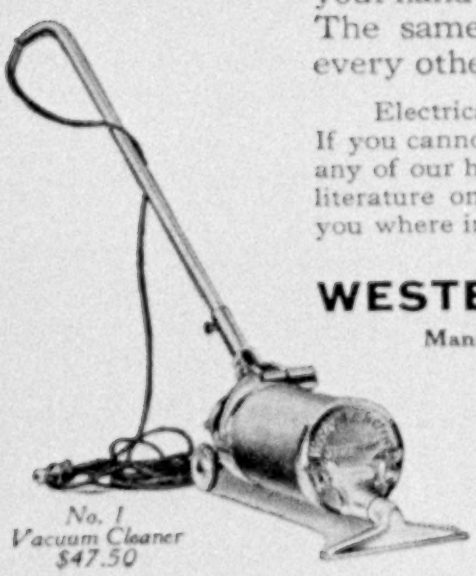

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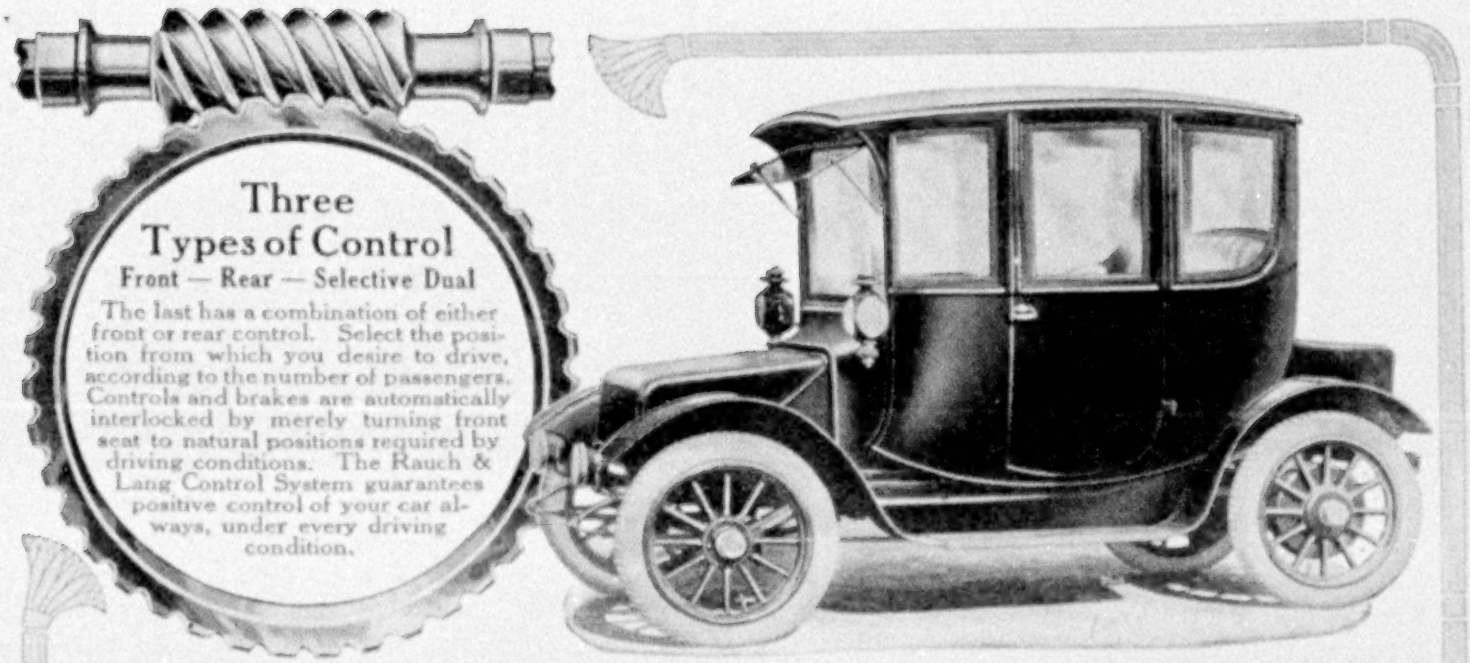
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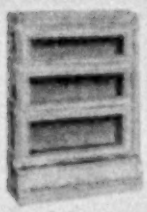
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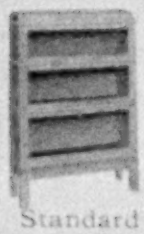
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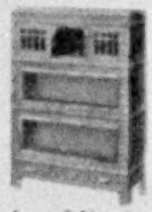
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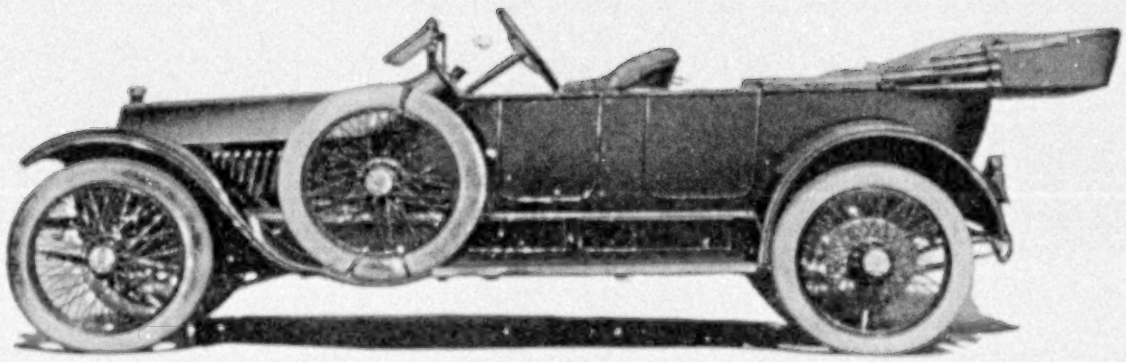

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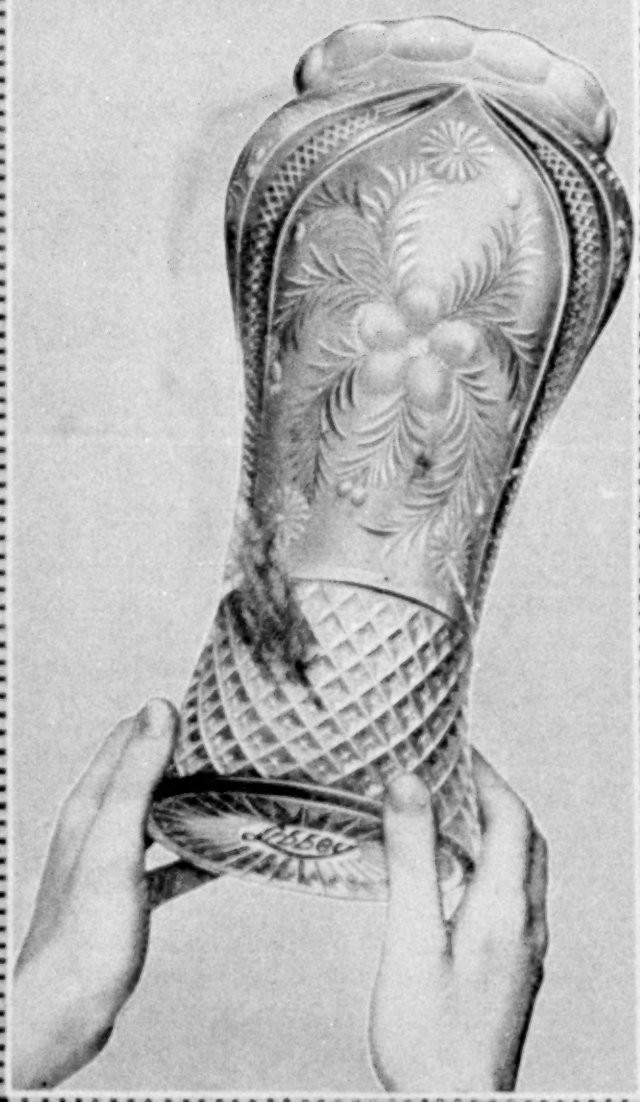

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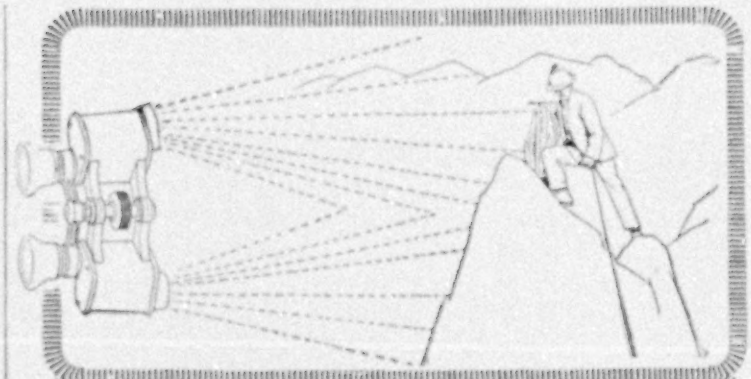

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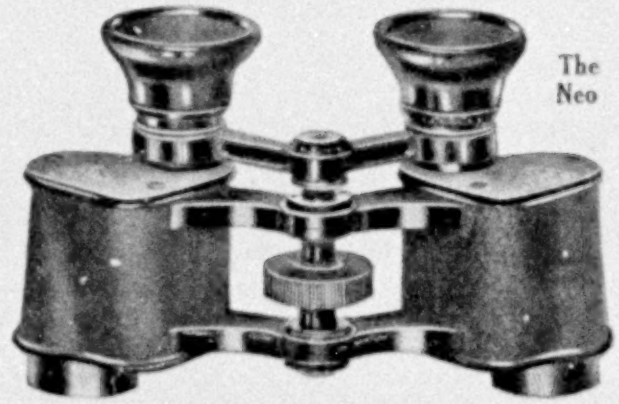

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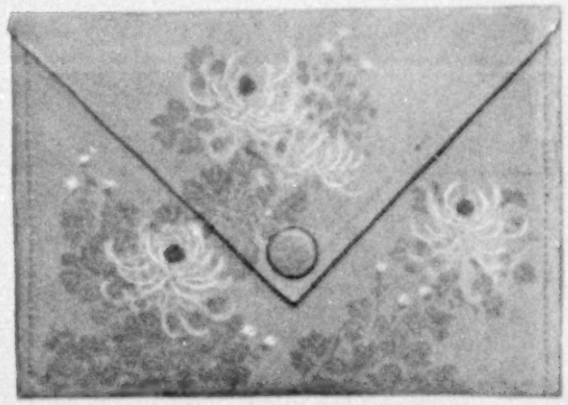

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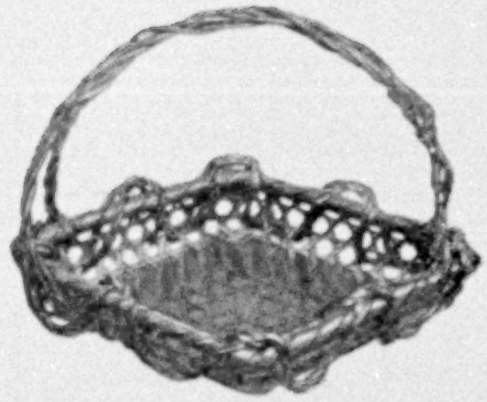

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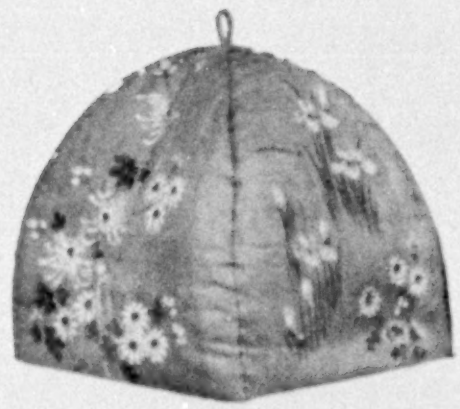

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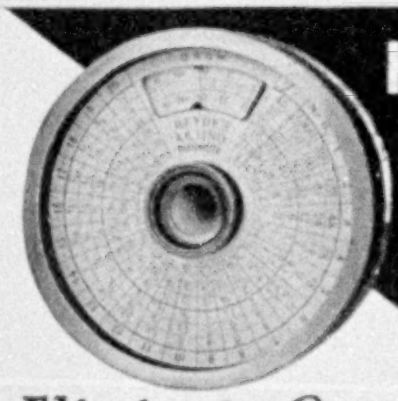

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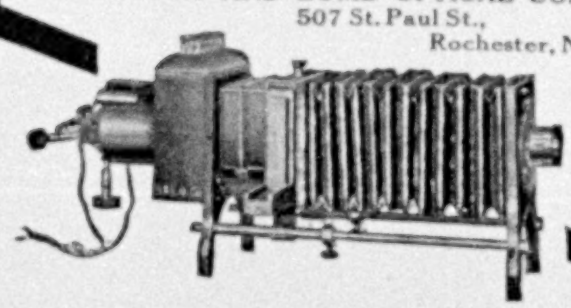

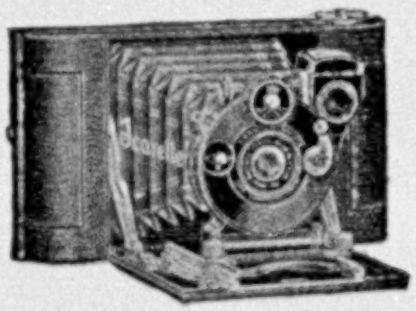

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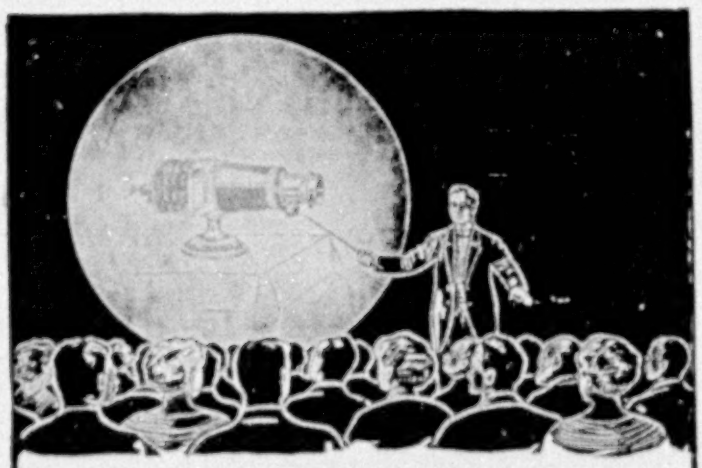

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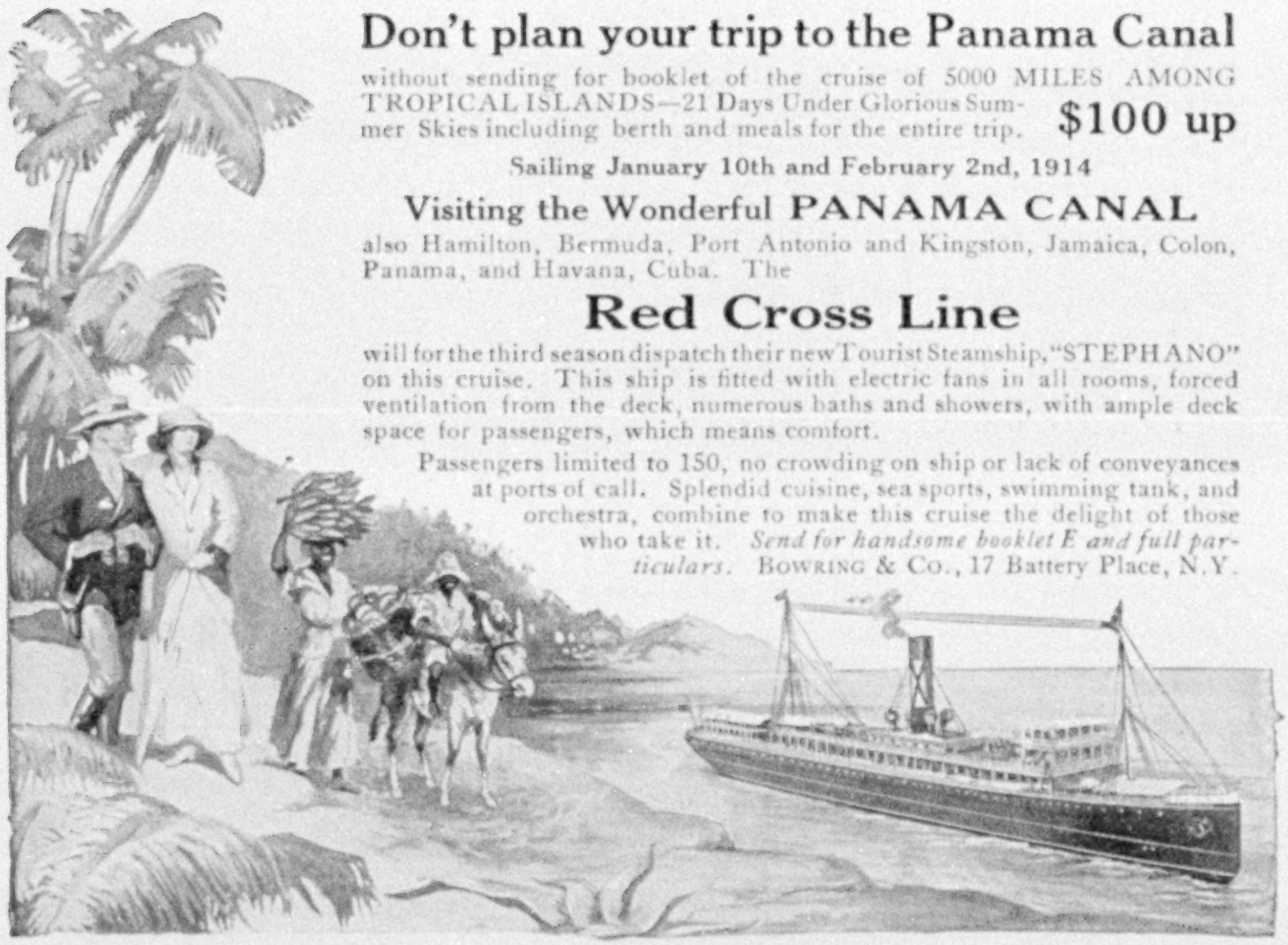

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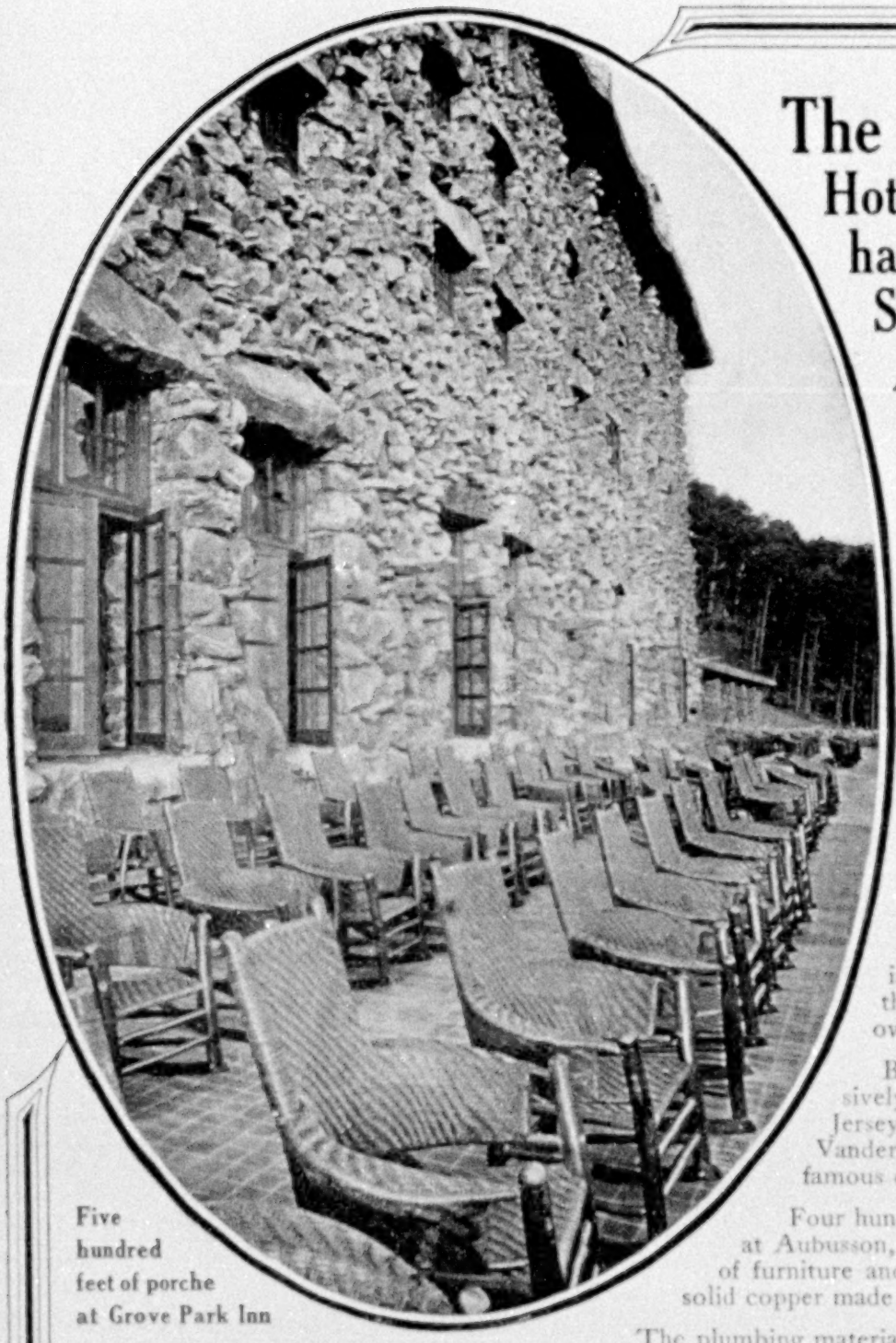

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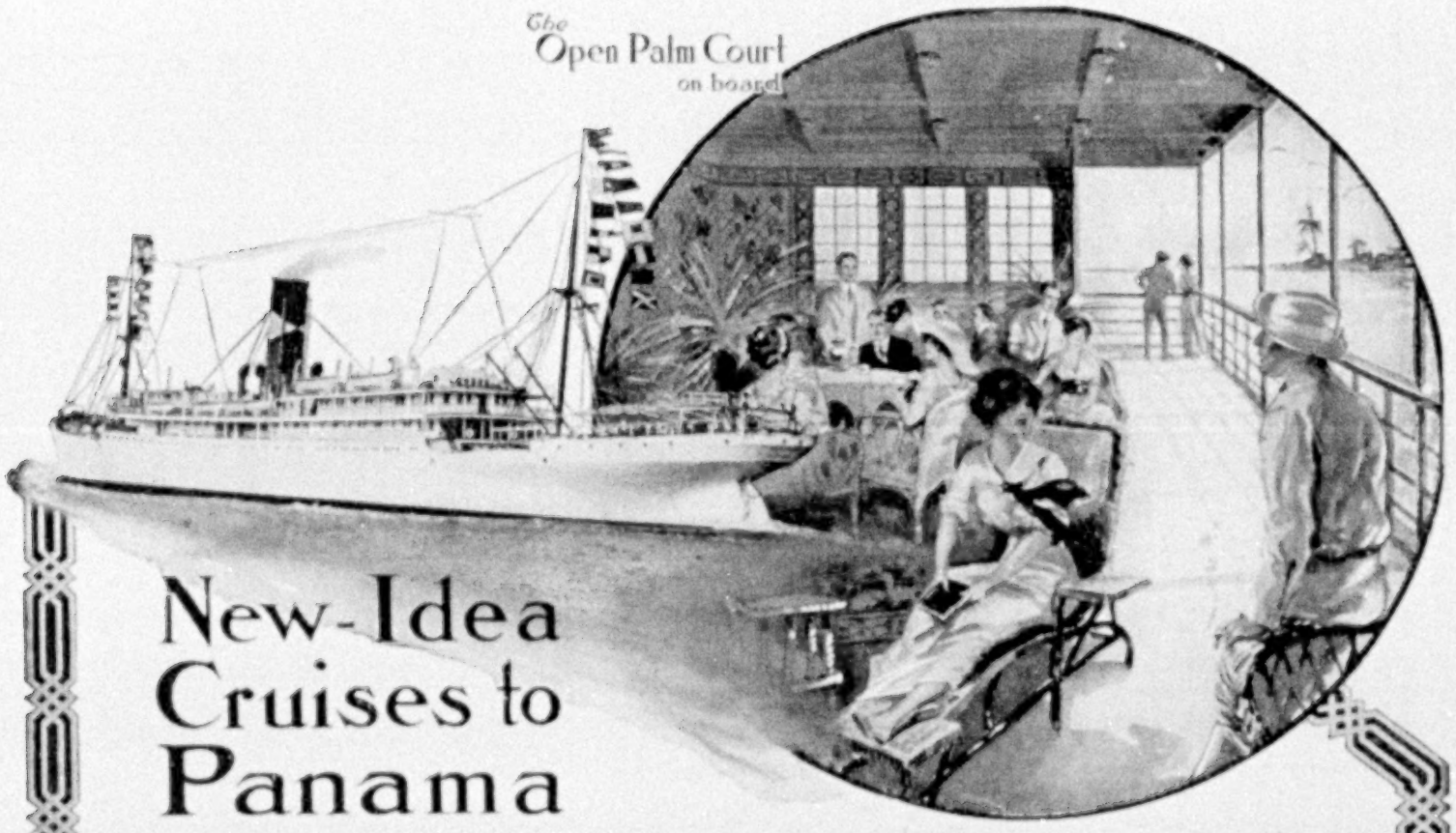

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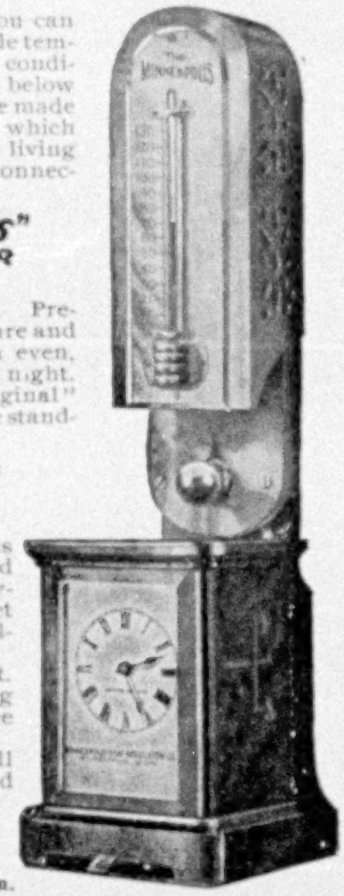

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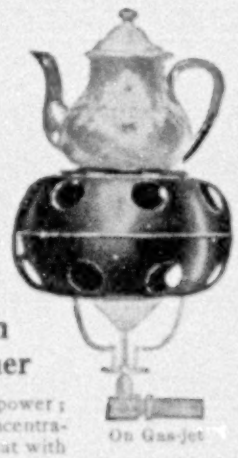

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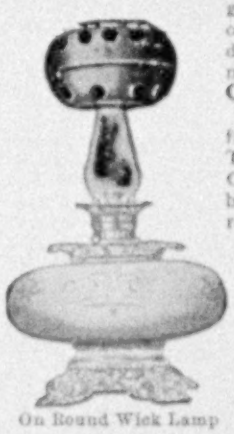

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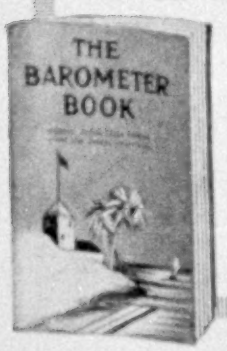

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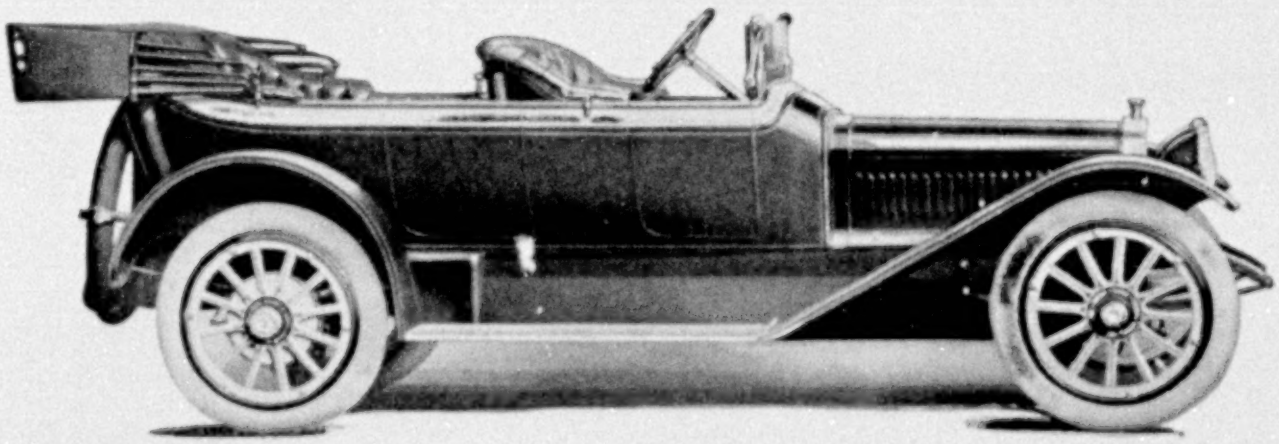

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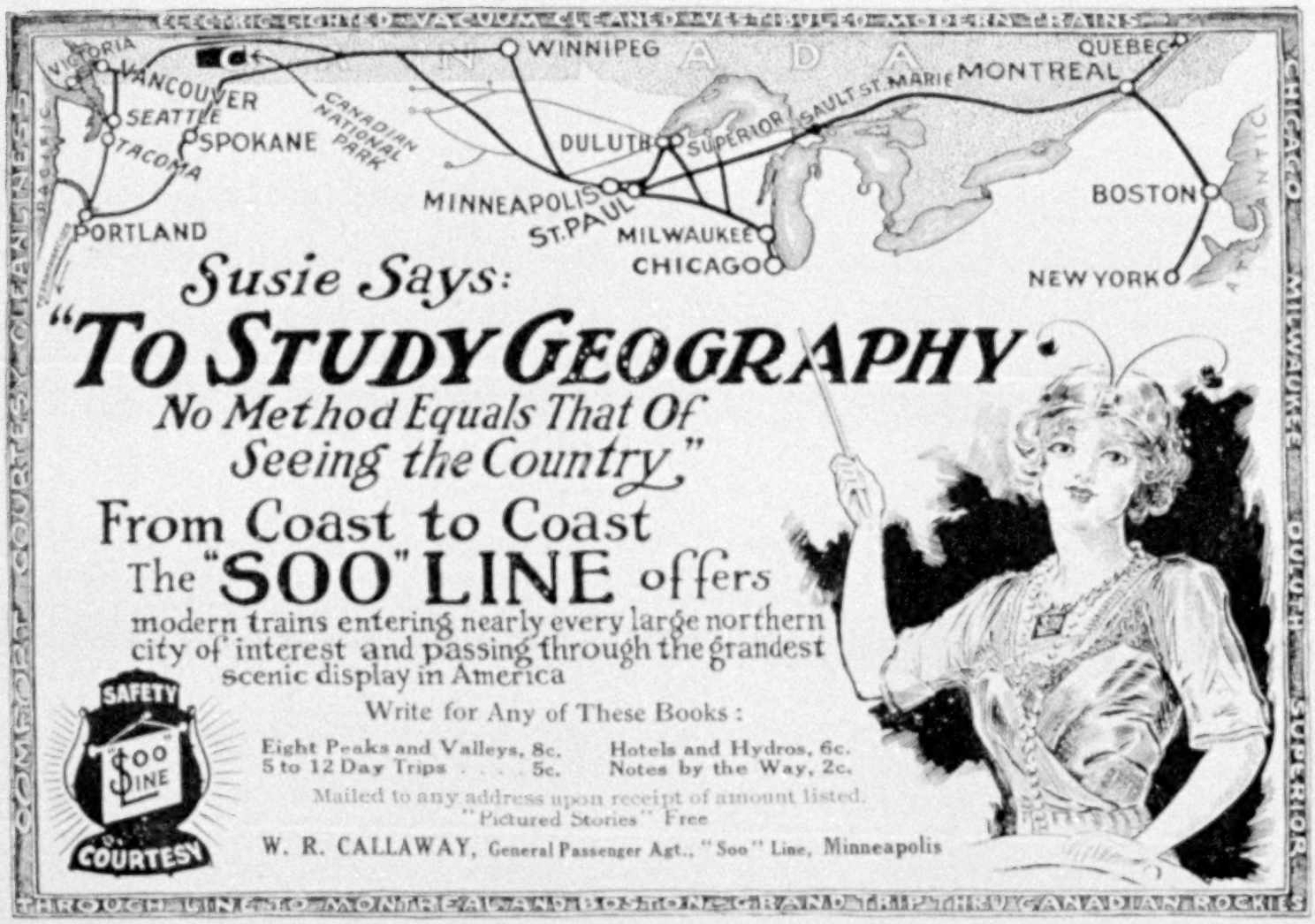

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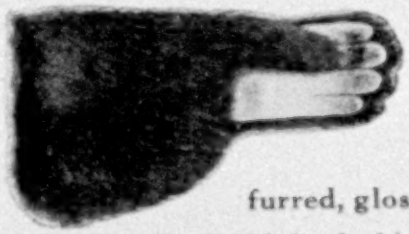

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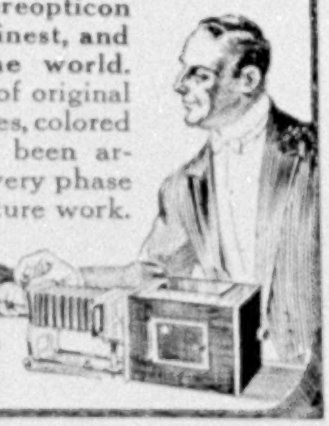

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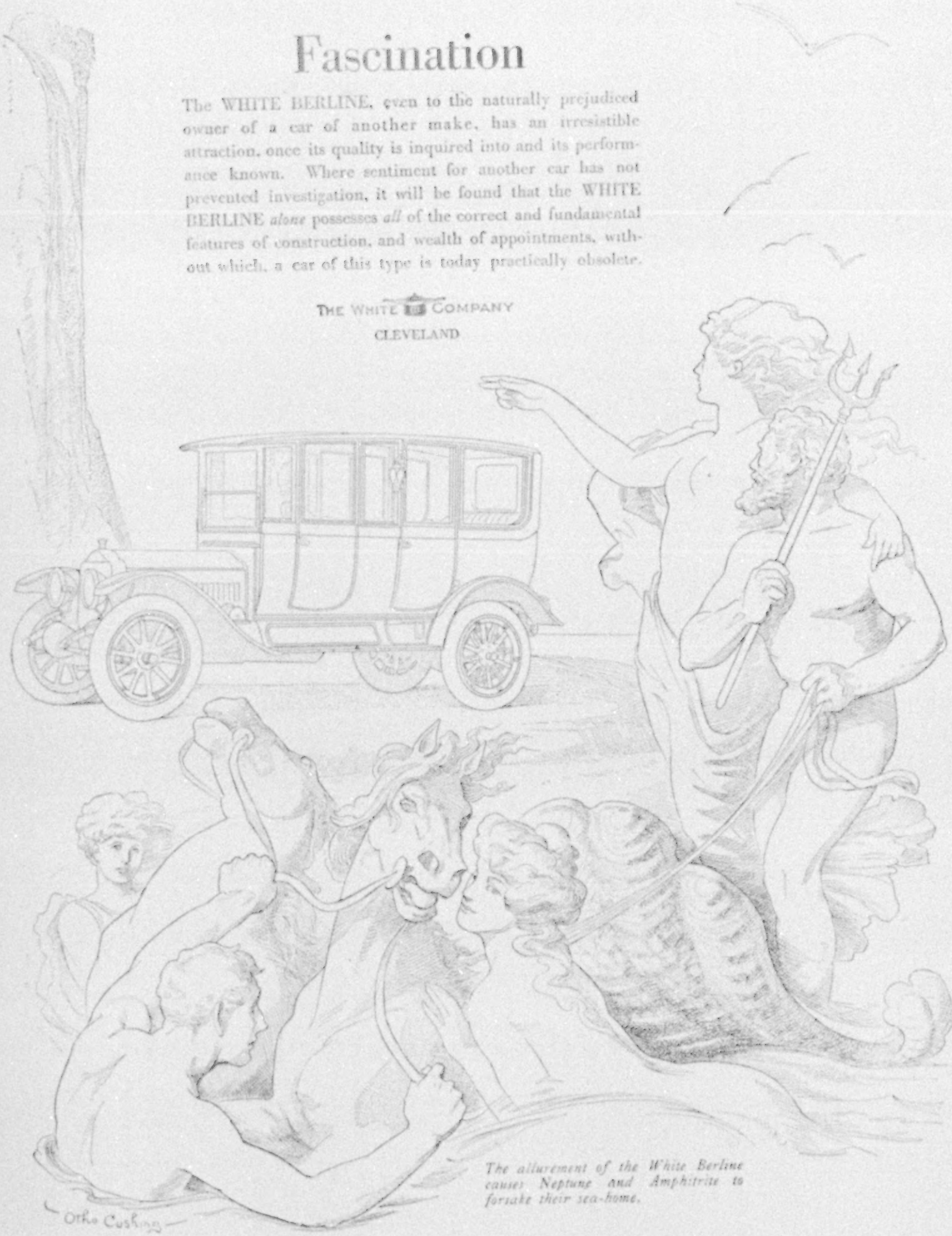

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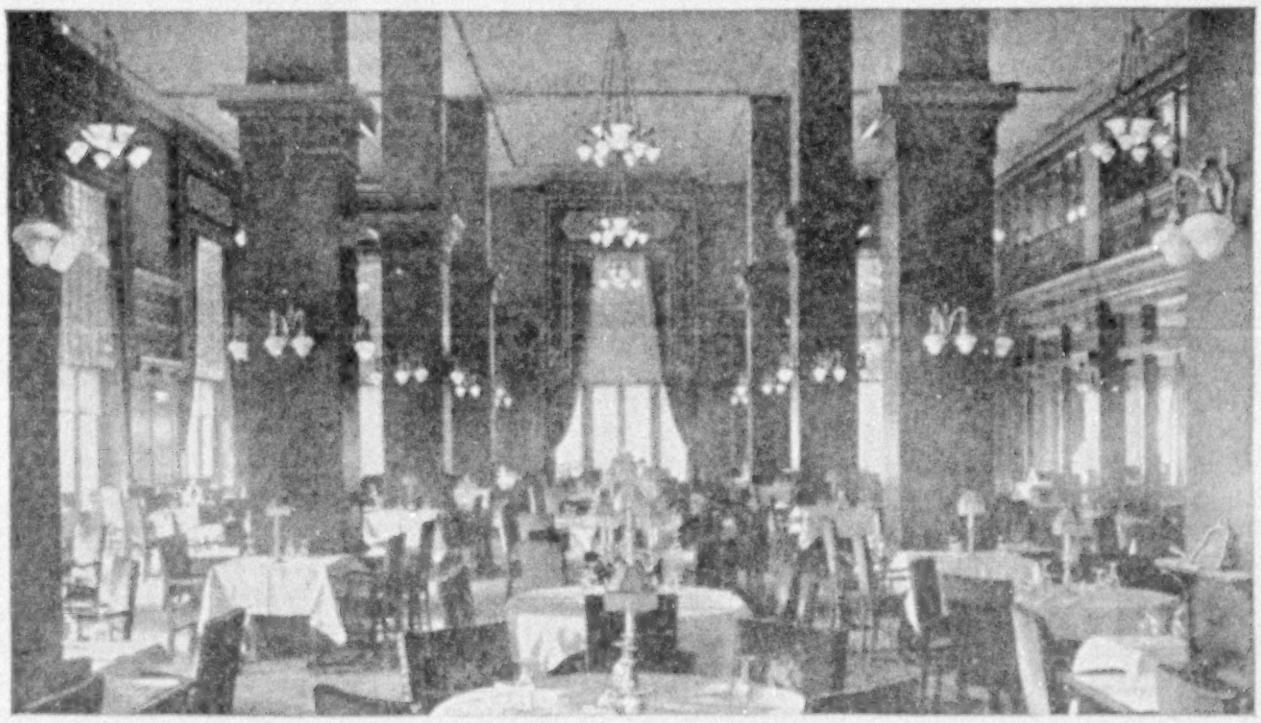

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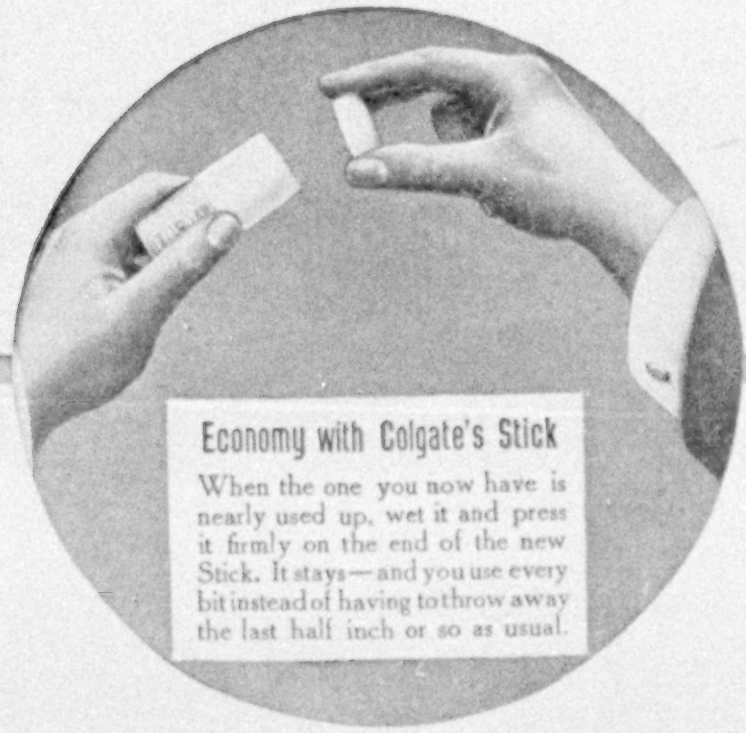
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